

**Submission  
No 8**

**INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS  
OF CLIMATE CHANGE ON THE ENVIRONMENT AND  
COMMUNITIES**

**Organisation:** Penrith City Council

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Our reference: InfoStore  
Contact: Carlie Ryan

27 October 2023

Ms Sue Higginson MLC  
Chair  
Portfolio Committee No. 7 – Planning and Environment  
NSW Parliament Legislative Council

Submitted online:

<https://www.parliament.nsw.gov.au/committees/inquiries/Pages/lodge-a-submission.aspx?pk=2987>

Dear Ms Higginson

**Upper House Inquiry into the Planning System and Impacts of Climate Change on the Environment and Communities**

Thank you for the opportunity to provide input to the Upper House's inquiry into the planning system and the impacts of climate change on the environment and communities.

This submission was endorsed by Council at its Ordinary Meeting on 23 October 2023 and is attached for your consideration.

If you have any questions about this matter, please contact Marianna Kucic, Strategic Partnerships and Policy Manager, on \_\_\_\_\_ or \_\_\_\_\_

Yours sincerely

Carlie Ryan  
City Strategy Manager

Penrith City Council  
PO Box 60, Penrith  
NSW 2751 Australia  
T 4732 7777  
F 4732 7958  
penrith.city

Attach.

## Submission

# Inquiry into the planning system and the impacts of climate change on the environment and communities

Prepared October 2023

### Introduction

Penrith City Council welcomes the opportunity to provide input to the Upper House's inquiry into the planning system and the impacts of climate change on the environment and communities.

In undertaking our Community Strategic Plan (CSP), our community expressed to Council that some of its top priorities were an ecologically sustainable environment and climate resilience. The CSP commits Council to working with the Government and our community to:

*Strengthen sustainability and climate resilience.*

Extreme weather events are on the rise and a changing climate presents physical risks to our assets, particularly from storms, floods and bushfires. These increasing weather events pose a threat to lives and property but also cause considerable damage to public assets such as roads, buildings and sports fields.

Council has taken steps to adapt to our changing climate while continuing to embrace technological advancements to ensure our energy use and waste generation is smart and clean. Council is also committed to building community resilience, such that our residents and businesses can adapt to changing circumstances, be prepared for shocks (including extreme weather events such as flood/bushfire/storm/heat) and manage vulnerabilities.

Council provides the following comments in respect to the inquiry:

## **Recognising urban heat and the heat island effect**

The Inquiry's Terms of Reference mention specific natural hazards and impacts of climate change, like flooding, bushfires and rising sea levels. However, the Terms of Reference do not mention urban heat, which must be recognised as a significant hazard and climate risk, particularly for the more vulnerable people in the community as well as ecosystems that are not well adapted to heat and rapid climatic events. Urban heat and the urban heat island effect is a documented and significant issue for Penrith City and Western Sydney generally.

Penrith has seen more hot days in the past few years than at any other time in our history. The impact of extreme heat combined with a heavy reliance on cars, lack of green space, air-conditioning units and industrial facilities that emit heat into the urban environment create a heat island effect. This has significant impacts on human health, energy demands for heating and cooling, local ecosystems and water cycles.

## **Planning powers to review, amend or revoke development approvals**

The Inquiry's Terms of Reference seek to report on the adequacy of planning powers and planning bodies to review, amend or revoke development approvals. At Penrith City Council, our approach (and that of the NSW planning legislation generally) is centred on "prevention" rather than re-visiting earlier development approvals. The intent of our land use planning and development assessment role is focused on restricting development if there is a significant risk to life, property or the environment from known natural hazards. In this regard it is questioned why the Terms of Reference did not have a focus on land use planning through zoning and permitted land uses rather than a focus on development assessment and past approvals under an existing planning framework.

For planning to be successful, there needs to be a robust evidence-base to support the assessment of risk; and clear, defensible development controls that explain under what circumstances development will be restricted or how risks may be mitigated. There also needs to be an open and transparent process where implications are assessed and understood. There must be broad scale public debate to determine risk appetite and hence where planning controls apply, and where they do not. The planning system and State policy must give statutory planning authorities unambiguous guidance on the acceptable risk profile, accepting the ongoing residual risk exposure.

## Consider broader policy framework

The Inquiry's Terms of Reference specifically reference the planning system. It is recommended that the State Government seek to understand, consolidate and streamline the myriad of climate change and risk management policies and frameworks in place at a Federal, State and local level. In particular, how the soon to be released Disaster Adaption Plan (DAP) framework and guidelines from the NSW Reconstruction Authority (NSWRA) relates to planning and the broader policy position.

## Processes and timeframes around the establishment of new Flood Planning Levels

In 2021 and 2022 our region experienced extreme flood events which forced thousands of residents of the Hawkesbury-Nepean Valley to evacuate their homes. The flood risk to the Hawkesbury-Nepean Valley is serious and ongoing. In March 2022, the NSW Government commissioned an independent expert inquiry (the Fuller/O'Kane Inquiry) into the preparation for, causes of, response to and recovery from the 2022 catastrophic flood event across the state of NSW.

Recommendation 18 of the Fuller/O'Kane Inquiry called on the NSW Government to adopt a risk-based approach to calculating the Flood Planning Level for planning purposes and, through the NSWRA, immediately start a process of revising all Flood Planning Level calculations in the State's high-risk catchments. It also recommended that Flood Planning Level re-determinations for all high-risk catchments be completed within 3 years, acknowledging that these revised Flood Planning Levels will need to be factored into all development applications (in-progress and new) in those catchments. Until such time as these levels are re-determined, development will continue to occur in the interim, based on existing Council and State policy – therefore it is critical that the revised Flood Planning Levels are clear, evidence-based, formed through genuine consultation, and determined in a timely manner.

The Inquiry found that in working out a tolerable, risk-based Flood Planning Level, consideration should be given to the Probable Maximum Flood (PMF), 1% Annual Exceedance Probability (AEP), 0.02% AEP, existing development, approved but not yet constructed developments, and existing and approved but not yet constructed evacuation routes. In coordinating this Flood Planning Level re-determination process, Council calls on the State Government (namely NSWRA) to work closely with local councils, the Department of Planning and Environment, communities, State water authorities and State and national engineering and research organisations.

The NSW Government has indicated that it supports in-principle Recommendation 18, but that further work is required on implementation. Council is seeking clarity and certainty on the risk management framework, timeframes, priority catchments and consultation process, for the establishment of new Flood Planning Levels.

### **Cost-benefit analysis**

Further consideration must be given to the costs and benefits (direct and indirect) of achieving desired outcomes in protecting people, and the natural and built environment, from climate impacts. A comprehensive up-to-date cost benefit analysis must be undertaken in considering costs. For example, health and wellbeing costs associated with climate impacts as well as the cost savings through mitigation/adaptation solutions over the longer-term (i.e. energy savings) are to be taken into consideration alongside upfront capital costs. There is also a need to improve understanding of costs, impacts and effectiveness of mitigation / adaptation measures and interventions, particularly across micro-climates at region and site-specific scales.

Understanding the opportunities and risks posed by climate hazards on the natural and built environment and being able to quantify the climate impacts on ecosystems and the services and values that they provide, will enable better planning and development outcomes. Finding ways to value the environment and quantify climate impacts should be incorporated into planning reforms.

### **The importance of a robust evidence-base**

A robust evidence-base is essential in the consideration of planning reforms over the short to longer-term, and in the identification of the most suitable place-based mitigation and adaptation measures to mitigate climate impacts. Appropriate climate data must be sourced and utilised in planning to accurately inform decision-making and ensure that our communities and natural and built environments are protected from climate impacts. With the impacts of climatic conditions over recent years, and the expectation of higher temperatures and greater risk of bushfire and floods in the future, the modelling of future climate projections should form the basis of data utilised rather than historical data. For example, the design, build and performance of new dwellings / developments must be assessed against future climate projections to ensure that homes are safe, efficient and comfortable, minimising the risk of impacts on vulnerable people.

Due to geography, geomorphology, and urban development, Western Sydney is more severely impacted by climate hazards such as heat, flood and bushfire. As such the application of climate adapted building standards for residential and commercial developments, resilience criteria built into the design and construction of community and public infrastructure, as well as planning solutions for retrofitting existing development, to mitigate and adapt to climate impacts, is crucial for Western Sydney. It is therefore essential for the planning system, planning reforms, and mitigation/adaptation measures to be informed by region specific climate data (i.e. Western Sydney based data for development planned in the Western Sydney region).

### **Natural environment and green infrastructure**

Green infrastructure, including tree canopy and landscape features support urban ecology and biodiversity, flood mitigation, increased amenity, and provide a cooling effect and shade to mitigate urban heat. Climatic events are likely to impact on our threatened ecological communities and tree species that provide much needed habitat for our native fauna. Council is supportive of climate mitigation and adaptation solutions and opportunities for improving the planning system to protect threatened ecological communities and threatened species habitat.

In addition, there needs to be more consideration for sustainable urban design solutions to be built into the planning system as a priority, to ensure that existing natural habitat, native canopy trees and green infrastructure is retained and integrated into developments to achieve cooling, biodiversity and flood mitigation benefits and positive outcomes for the community.

### **State Assessed Planning Proposal Pilot Program**

State Assessed Planning Proposals enable the State Government to call-in and assess proposals that are of state or regional planning significance. These proposals often apply to places that have complex planning, infrastructure and stakeholder issues. Being so complex, it is important that these proposals do not ignore climate and environmental considerations.

The State Government needs to ensure State Assessed Planning Proposals comply with both councils and the State Government's existing measures to address climate events. There may need to be a greater focus on the "quality over

quantity” of housing to achieve measures that will mitigate the impacts of climate events, such as tree canopy targets and urban heat controls.

### **Local Infrastructure Contributions**

Local infrastructure contributions, also known as developer contributions, are charged when new development occurs. These contributions help fund infrastructure like parks, community facilities, local roads, footpaths, stormwater drainage and traffic management. However, the State Government prescribes which public amenities or public services are considered ‘essential works’.

The essential works list must be updated to allow councils to seek a contribution towards infrastructure critical to mitigating climate events. This could include seeking contributions for street trees and associated tree pits that allow for a road profile that will assist to achieve a canopy target, funding for tree planting in public open spaces to achieve canopy targets, shade structures for parks and water features that address urban heat.

### **Council’s infrastructure priorities**

Environmental shocks such as floods and bushfires are one of the greatest threats to our City’s prosperity. So-called ‘once in a twenty-year floods’ are now happening multiple times a year with devastating effects on our community and our city resources. These events highlight the urgent need for improved evacuation routes to safeguard communities during extreme weather events. Investment in critical infrastructure such as the Castlereagh Connection is needed to strengthen our emergency response and provide a swifter, safer flood and bushfire evacuation option for residents of the Hawkesbury-Nepean Valley.

The Castlereagh Connection is a road corridor that has been set aside for several decades, but not yet planned or delivered. The new road would improve connectivity, address congestion and improve flood evacuation in Penrith. Council is advocating for progression of a business case by Government (Federal and State) as well as funding for the delivery of this critical regional connection.

There is also a need for funding of enhanced flood resilience for roads and evacuation routes. Works such as road shoulder widening, new culvert and bridge structures, road raising, pinch point upgrades, and drainage improvements are some of the measures that can be designed to address local flash flooding, which often leads to the premature closure of evacuation routes.



Environmental shocks can threaten a city's prosperity, having impacts beyond the direct effects of a single flood, fire or heatwave. There is therefore a need for undertaking an assessment of economic impact across the State, region or at a major city level. There also needs to be clarity on how these economic impact assessments will be funded.

### **Next Steps**

The universal challenge of extreme weather events, as experienced in Penrith with urban heat, bushfire and flood, have brought into sharp relief the need for cities to more rapidly reduce carbon emissions to mitigate impacts, while at the same time, to strengthen their resilience to its impacts. How we respond to these global challenges at a local level will determine the future liveability, productivity and sustainability of Penrith as a city and the wellbeing of our communities.

Penrith City Council looks forward to ongoing collaboration with the NSW Government with respect to addressing these impacts on our environment and communities.