SECCCA
South East Councils
Climate Change Alliance

# SECCCA RESIDENTIAL CASE STUDY: **OVERVIEW**

## BACKGROUND

The SECCCA region is particularly vulnerable to climate change. SECCCA has been working with the Insurance Council of Australia (ICA) and 5 SECCCA member Councils to identify key adaptions to protect privately owned assets, particularly homes, from the impacts of climate change. The Residential Case Study project will provide participating councils with an understanding of the likely impacts on the most exposed and vulnerable residential dwellings in the community and potential protection options.

This project is scheduled for completion by end of March 2023.
It builds upon the existing SECCCA Asset Vulnerability Assessment (AVA) project to determine climate impacts on residential dwellings, the vulnerability hotspots, likely damage and loss scenarios and to identify priority adaptation actions that can be taken in the region to strengthen the resilience of communities.

The focus for this project is on flood events, with other climate impacts such as bushfire and heatwaves being addressed at a higher level.

## PROJECT OBJECTIVES

The overarching objective of the project is to understand the level of risk to residential homes and consider actions to build suitable adaptation measures and address these risks, leading to improved climate resilience of residential homes.

## SUPPORTED BY

This project is funded by the Insurance Council of Australia (ICA). The ICA are working alongside the community, governments and industry to help ensure insurance remains affordable and accessible as climate change drives worsening extreme weather events across Australia.

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## PROJECT ADMINISTRATION AND GOVERNANCE

SECCCA is managing the project, with the technical expertise of consultants Spatial Vision. A working group of the five Councils – Bass Coast, Bayside, Kingston, Mornington Peninsula and Frankston - are providing advice and supporting project delivery.

## PROJECT ACTIVITIES

A key understanding of this project will be the classification of housing stock in each of the participating Council regions. This suggested housing archetype structure will allow for a systematic classification and analysis. These archetypes will draw on other studies and material undertaken to date, and will be based on typical designs and materials, age of home relating to building codes and standards.

Working with five SECCCA council members and climate science experts, the project will identify and visualise the types of residential homes across specific locations that are most vulnerable to the impacts of climate change.

The project outcomes and approach will be provided to participating Councils to assist them with preparing their communities and protecting the most vulnerable residential homes. SECCCA will also use this information to inform their state and federal advocacy work.

## KEY PROJECT DELIVERY STEPS

The following are the key steps of the project:

- Development of a generic framework for the categorisation of residential properties in relation to associated climate related risk parameters. The categorisation will draw on key studies undertaken to date and aims to have potential national application. It will allow for scalability and repeatability across differing jurisdictions, and ultimately a mixture of exposure types and hazards outside of flooding.
- Development of a working set of documented residential archetypes for the agreed study area based on initial categorisation.
- Development of a technical report outlining the methodology applied and project findings. Methodology will focus on the application of the framework in undertaking a risk assessment for localities (and possible sub-catchments) within participating SECCCA councils, where the initial focus will be on flooding from an insurance and damage viewpoint. Application of the framework to heat wave impacts (particularly on occupants) may also be considered.

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- Spatial outputs of the assessment on housing stock in the 5 participating councils of the SECCCA region, incorporating the identification of focal areas, application of housing archetypes and the damage costs or curves. Spatial data will be provided in a QGIS format and accompanied by supporting documentation that provides worked examples of how the methodology was applied. These outputs will be packaged in the form of mentoring material to support councils in the application of the process undertaken.
- Workshops with key stakeholders including the ICA at key stages in the project.