



Killarney Vale and Long Jetty Floodplain Risk Management Study and Plan

CONSULTATION SUMMARY

July 2018

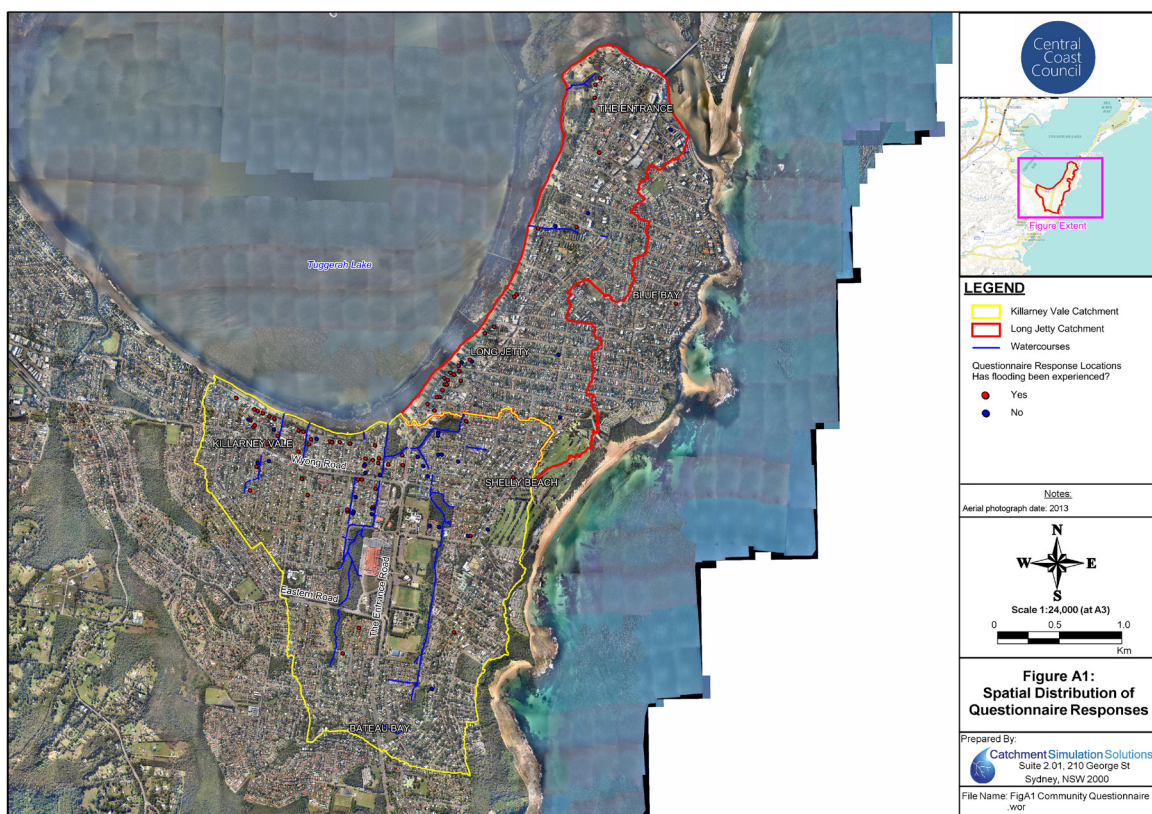
OVERVIEW

Central Coast Council recognises that the community is an important part in the development of the floodplain risk management study and plan for the Killarney Vale and Long Jetty catchments. Separate consultation activities were completed during the flood study and the floodplain risk management study recognising the different focus of each study:

- The consultation during the flood study aimed to collect information about the community's past flooding experience, with a particular focus on gathering information that could be used to calibrate the computer flood model;
- The consultation during the floodplain risk management study was targeted at obtaining feedback from the community regarding the best way to manage the flood risk as well as how they would likely respond during a future flood.

A summary of the outcomes of each phase of the consultation is provided below.

Figure A:



FLOOD STUDY

A community information brochure and questionnaire were prepared and distributed to all households and businesses within the Killarney Vale and Long Jetty catchments during 2014.

The questionnaire sought information from the community regarding whether they had experienced flooding, the nature of flood behaviour, if roads and houses were inundated and what was the major cause of flooding. A total of 585 questionnaire responses were received.

The following information was gathered from the responses to the questionnaire:

- The majority of respondents have lived in or around the catchment for around 20 years. Accordingly, most respondents experienced the 2007 and 2010 floods, however, were not living in the catchment during the 1981 flood (i.e., the largest flood on record).
- Approximately one quarter of respondents have experienced some form of disruption as a result of flooding in the study area. This includes:
 - » 73 respondents have experienced traffic disruptions;

- » 154 respondents have had their front or back yard inundated; and
- » 24 respondents have had their house or garage inundated.
- The following streets/areas were identified by several respondents as being particularly susceptible to flooding problems:
 - » Shelley Beach Golf Course / Grandview Street, Shelley Beach
 - » Tuggerah Lake foreshore
 - » Brooke Avenue/Hume Boulevard, Killarney Vale
 - » Tasman Ave/Kathleen White Crescent, Killarney Vale
 - » Sierra Ave, Bateau Bay
 - » Neale St/McLachlan Ave, Long Jetty
- Several respondents noted that they have purchased pumps to help alleviate flooding/ponding of water across their yards and prevent inundation of their home/garage.
- Those respondents living across lower sections of the study area indicate that flooding is predominately caused by elevated water levels within Tuggerah Lake. Those respondents living across the more elevated sections of the catchment believe flooding is exacerbated by:
 - » lack of routine maintenance / blockage of stormwater pipes and culverts
 - » Inadequate stormwater system
 - » Lack of kerb and gutter

A number of respondents provided photos of past flood events.

FLOODPLAIN RISK MANAGEMENT STUDY

Consultation with the community was also completed at various stages throughout the preparation of the floodplain risk management study. A questionnaire was distributed to 1060 households and businesses during the initial stage of the project, late 2017, in an effort to understand the types of flooding impacts that the community has experienced, how people would respond during future floods and what key objectives potential flood risk management measures should focus on.

The questionnaire was also included on an interactive website. The website provided the community with an opportunity to explore the advantages and disadvantages of potential flood risk management options and make a more informed decision on what options may be appropriate for implementation as part of the study:

<http://www.floodengage.com/killarneyvalelongjetty/>

During the course of the study (up to April 2018), the website was visited 54 times.

A total of 132 questionnaire responses were received. When combined with the flood study (i.e., 585 responses), a total of 717 questionnaire responses were received over the course of the project.

A summary of the key outcomes of the consultation is provided below:

FLOOD IMPACTS:

- 67% of the questionnaire respondents had been impacted by flooding (the location of properties that have experienced flooding problems are shown in **Figure A**).
- The most common reported impact was roadways being cut by water followed by flooding of garages and sheds. Three respondents reported above floor inundation of their house.

FLOOD AWARENESS:

- 36% of respondents did not know whether their property could be potentially flooded or not.
- 43% of respondents acknowledged that their home or business could be flooded.

EVACUATION:

- During a future flood, 54% of respondents said that they would remain at home.
- Only 15% said they would evacuate to an official evacuation centre.
- The primary reason for people choosing to stay at home was concern for the security of their property should

they evacuate.

FLOOD RISK MANAGEMENT OPTIONS:

- The following factors/goals were considered to be the most important by the community when developing a potential list of flood risk management options:
 - » Provides safety to the community during floods
 - » Reduced flood damages to the community
 - » Raises community awareness and understanding of the local flood risk
 - » Improved community access and recreational use
- The interactive website outputs indicate that the following potential flood risk management options were the most favoured by the community:
 - » Local Flood Policies and Development Controls
 - » Voluntary Purchase of Properties
 - » Local Flood Plan Updates
 - » Local Flood Warning / Flood Forecasting System
 - » Upper Storey Flood Free Refuges
- The interactive website outputs suggested the following potential flood risk management options were the least favoured by the community:
 - » Rainwater Tanks
 - » Increased Infiltration Capacity
 - » Earthen Levee
 - » Concrete Lined Channels
 - » Channel Realignment

WHAT NEXT?

Council has reviewed the responses to the community questionnaire and have used that information to inform the development of a short list of options that could be potentially implemented to better manage the flood risk across Killarney Vale and Long Jetty.

This included a range of structural as well as non-structural (e.g., planning) mitigation measures. Council's consultants will be undertaking a detailed evaluation of each option to quantify the advantages and disadvantages of each, which will inform which options will move forward into the floodplain risk management plan for the area. This evaluation will include computer modelling of each of the structural options to determine how beneficial each option is in reducing the frequency and severity of floodwater inundation.

The outcomes of the options evaluation will be presented in the draft floodplain risk management study report, which will be placed on public exhibition later this year.