



Wagga Wagga
City Council

Flood Futures

Tarcutta Village Flood Study- March 2015

Introduction

This Flood Study is made up of three reports commissioned by Wagga Wagga City Council to define flood behaviour in Tarcutta, Uranquinty and Ladysmith under current conditions

Lyall & Associates were engaged to undertake all three reports, which involved data collection, the development and testing of flood models, and design flood modelling for these villages.

These reports consider design floods ranging between 1 in 5 year and 1 in 500 year flood events, as well as a probable maximum flood.

By way of context, the October 2010 flood was approximately a 1 in 70 year flood event for Tarcutta, while the March 2012 flood was approximately a 1 in 20 year flood event.

The studies will help Council make informed decisions about risk management on the floodplain.

Findings for Tarcutta

The modelling outlines where the water flows as well as how deep it gets at certain point in various flood events.

Some key findings of the study include:

- During a 1 in 100 year flood event, floodwaters on Tarcutta Creek extend over a width of 800m - 900m.
- The urban area of the village is also subject to major overland flow inundation from the local sub-catchments which drain westwards to Tarcutta Creek.
- Significant overland flows commence at the 1 in 10 year level of flooding due to surcharges of the trunk drainage system.
- The time of rise of Tarcutta Creek under design flood conditions is around 15 hours.
- The response time of the major overland flow paths through the urban area is generally limited to less than one hour.

Please turn over for a map showing the modelling for a 1 in 100 year flood event.

You can find the full reports on the Flood Futures website:

wagga.nsw.gov.au/floodfutures

Community feedback

It's important to gauge the views of the community on the Village Flood Study for Tarcutta, which is currently on public exhibition until **Friday 17 March 2015**.

There are a number of ways that you can make a submission:

Mail: The General Manager, Wagga Wagga City Council, PO Box, NSW 2650

Email: council@wagga.nsw.gov.au

Deliver to: Wagga Wagga City Council, Cnr Baylis and Morrow Streets, Wagga Wagga

Alternatively, please fill out a form provided at the Community Information Sessions.

What next?

Once finalised, these Village Flood Studies will help inform a Floodplain Risk Management Study. Council is currently investigating options to help fund this next phase.

Floodplain Risk Management Study will determine options which will seek to reduce the impact of flooding on the community in consideration of social, ecological and economic factors.

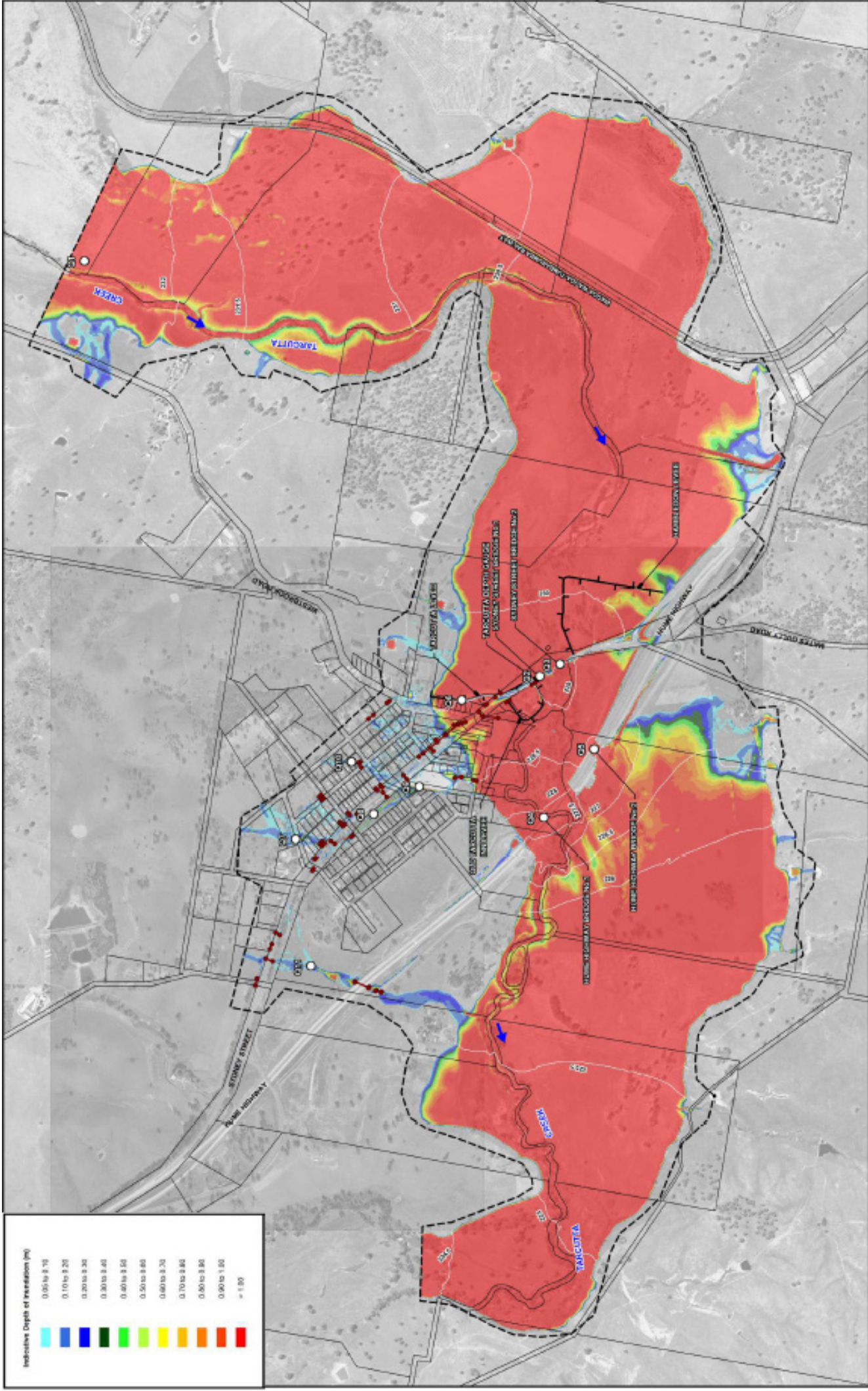
Updates on this project and other Wagga Wagga City Council flood related projects can be found on the Flood Futures website:
wagga.nsw.gov.au/floodfutures

More information

Email: floodfutures@wagga.nsw.gov.au

Phone: Lauren Fitzgerald, Community Engagement Officer 1300 292 442

www.wagga.nsw.gov.au/floodfutures
1300 292 442



Inundative Depth of Inundation (m)

0.05 to 0.10
0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00

TARCUTTA, LADYSMITH AND URANQUINTY FLOOD STUDIES
DESIGN FLOOD MODELLING

LEGEND

- Modelled Stormwater Network
- Two-Dimensional Model Boundary
- Water Surface Contours (m AHD) (Mainstream Flooding Only)
- Alignment of Existing Levee
- Peak Flow Locations and Identifier (Refer Table A1 in Appendix A)

150 0 150 300 450 m
Scale: 1:15,000

NOTE:
The extent and depths of flood by above were determined from informal laser scanning survey and are approximate only. The extent of inundation in high relief areas near the flood fringe should be confirmed by site specific survey.



Figure 3.7

TARCUTTA TUFLOW MODEL RESULTS
100 YEAR ARI