

LEGEND

Hydraulic Categorisation

- Flood Fringe
- Flood Storage (peak flood depth >0.5m at the 5% AEP event)
- Floodway (peak velocity * depth product >0.3 at the 5% AEP event)

Title:

Woolgoolga Floodplain Risk Management Study
5% AEP Hydraulic Categorisation

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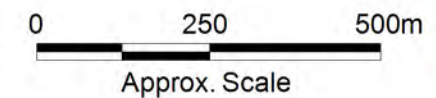
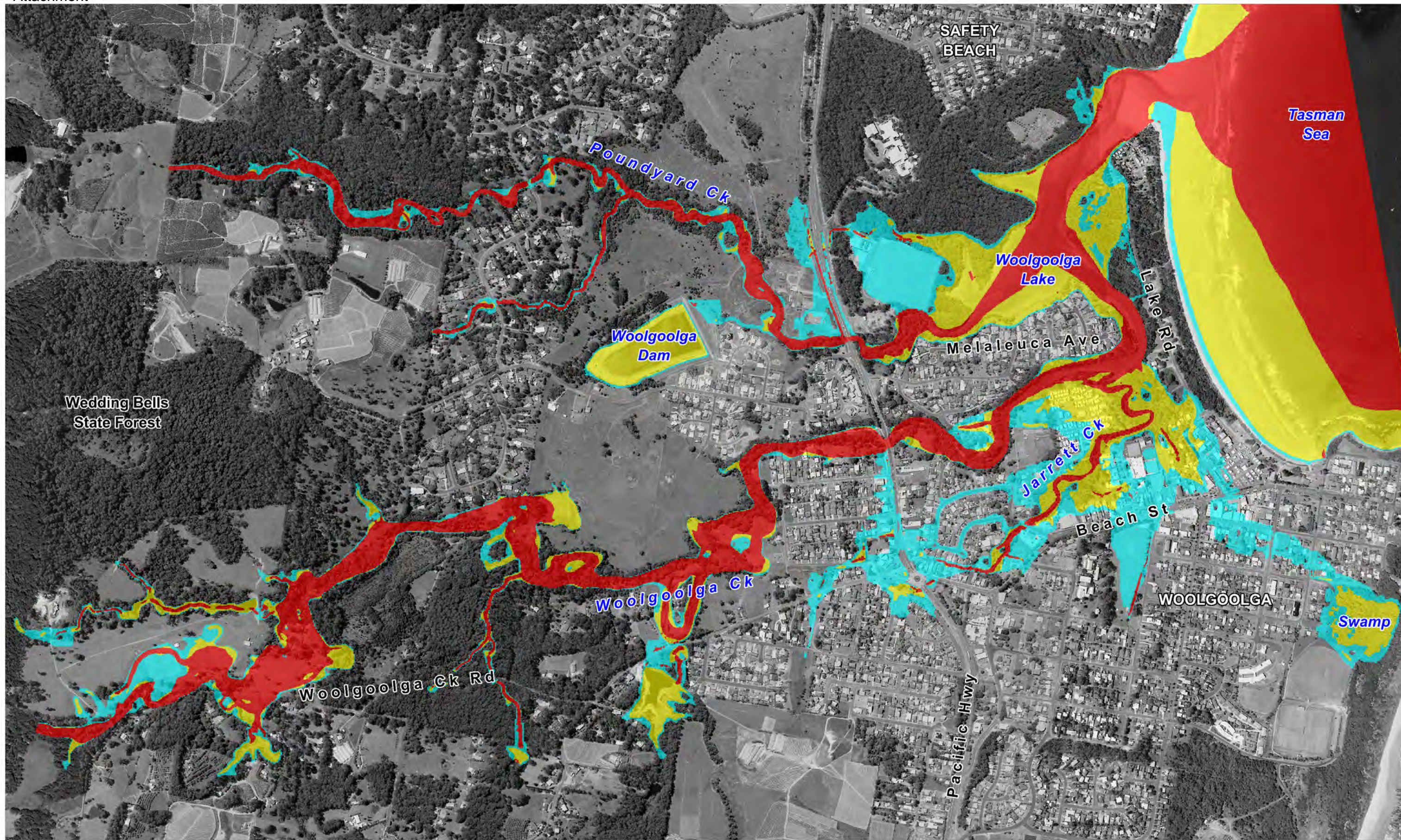


Figure:
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LEGEND

Hydraulic Categorisation

- Flood Fringe
- Flood Storage (peak flood depth >0.5m at the 2%AEP event)
- Floodway (peak velocity * depth product >0.3 at the 2%AEP event)

Title:

**Woolgoolga Floodplain Risk Management Study
2% AEP Hydraulic Categorisation**

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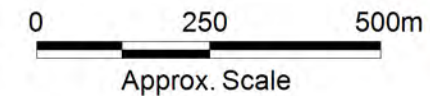
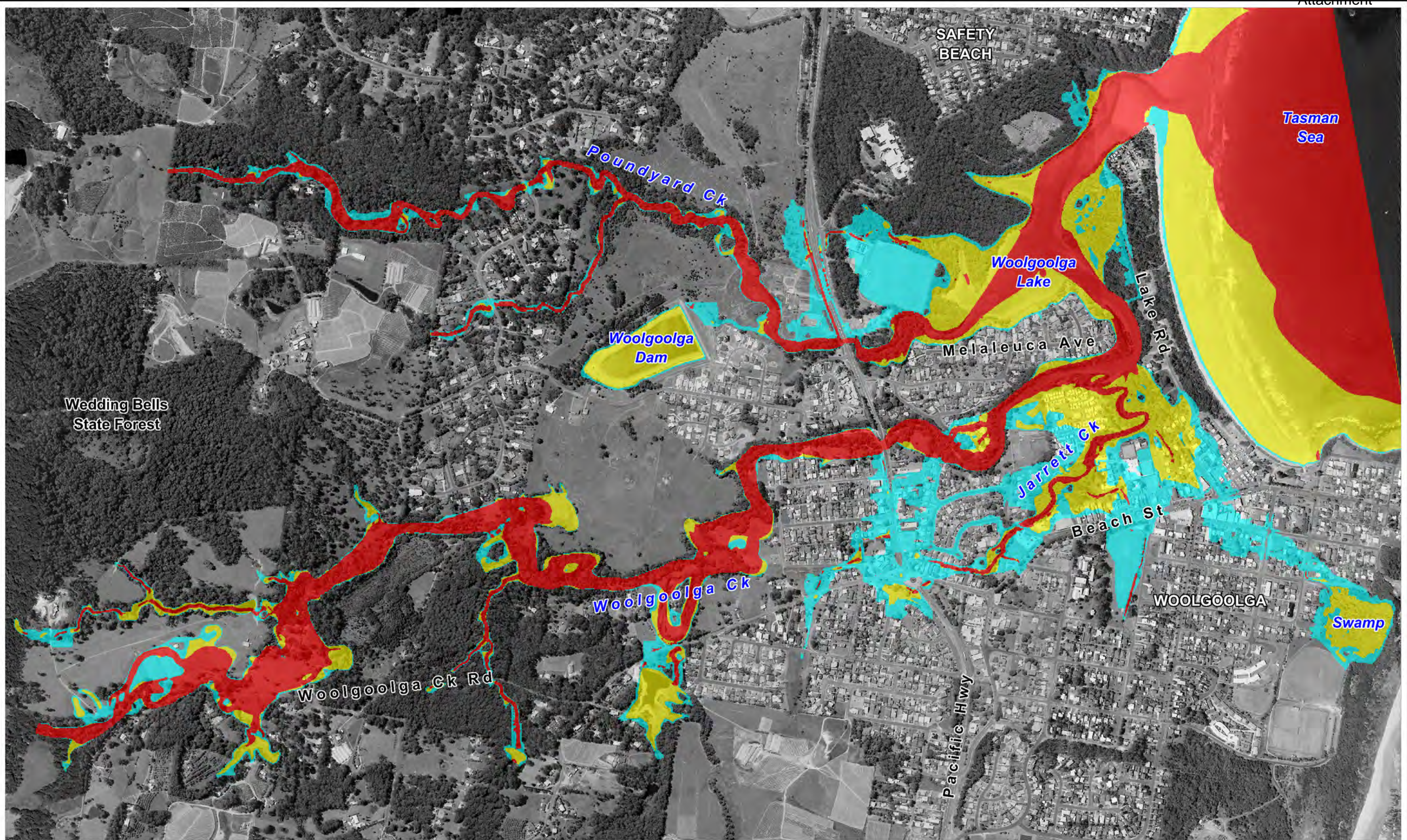


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LEGEND

Hydraulic Categorisation

- Flood Fringe
- Flood Storage (peak flood depth >0.5m at the 1% AEP event)
- Floodway (peak velocity * depth product >0.3 at the 1% AEP event)

Title:

Woolgoolga Floodplain Risk Management Study
1% AEP Hydraulic Categorisation

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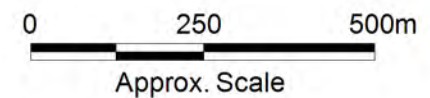
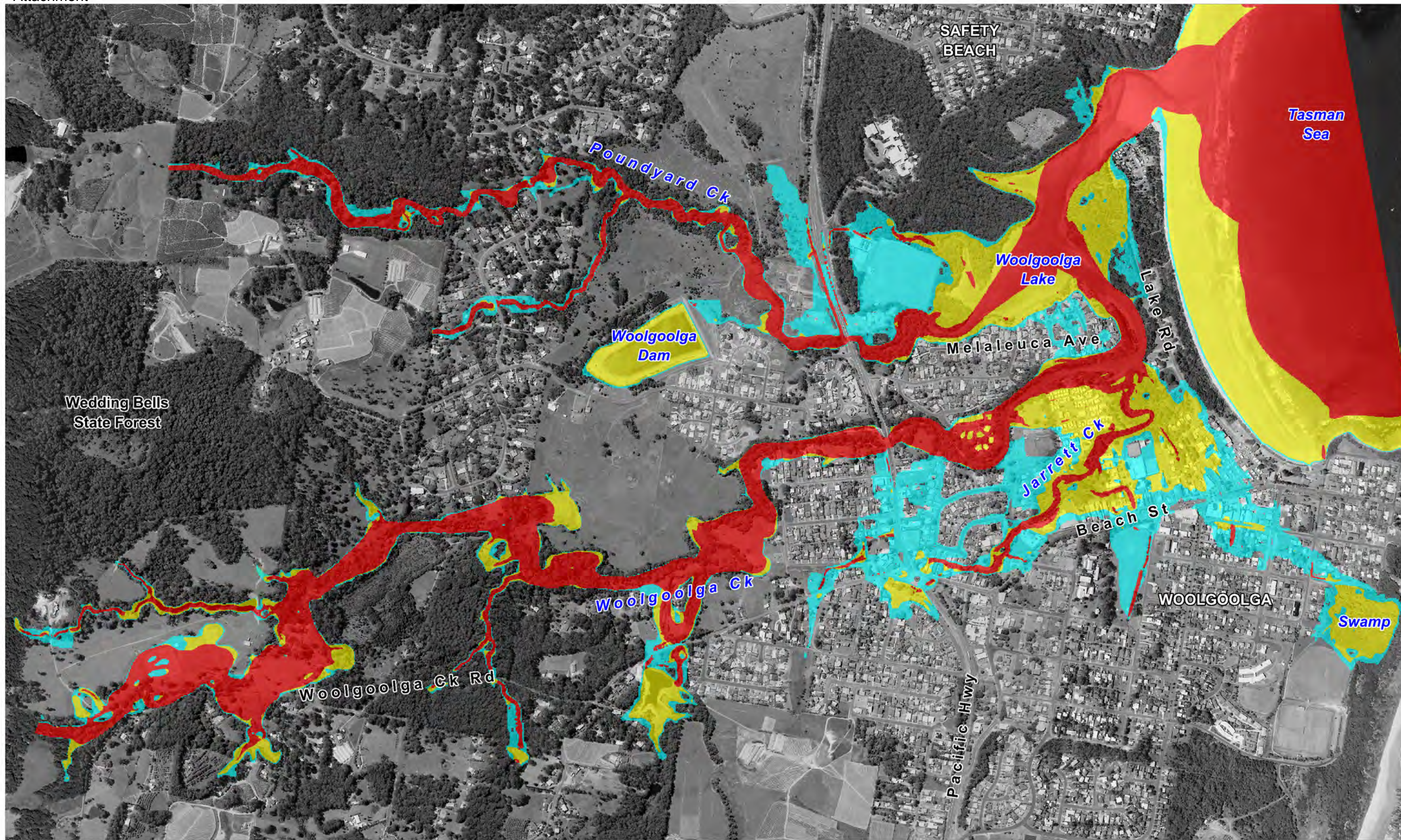


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LEGEND

Hydraulic Categorisation

- Flood Fringe
- Flood Storage (peak flood depth >0.5m at the 0.2%AEP event)
- Floodway (peak velocity * depth product >0.3 at the 0.2%AEP event)

Title:

**Woolgoolga Floodplain Risk Management Study
0.2% AEP Hydraulic Categorisation**

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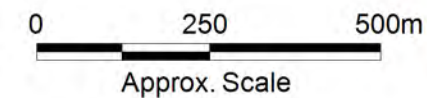


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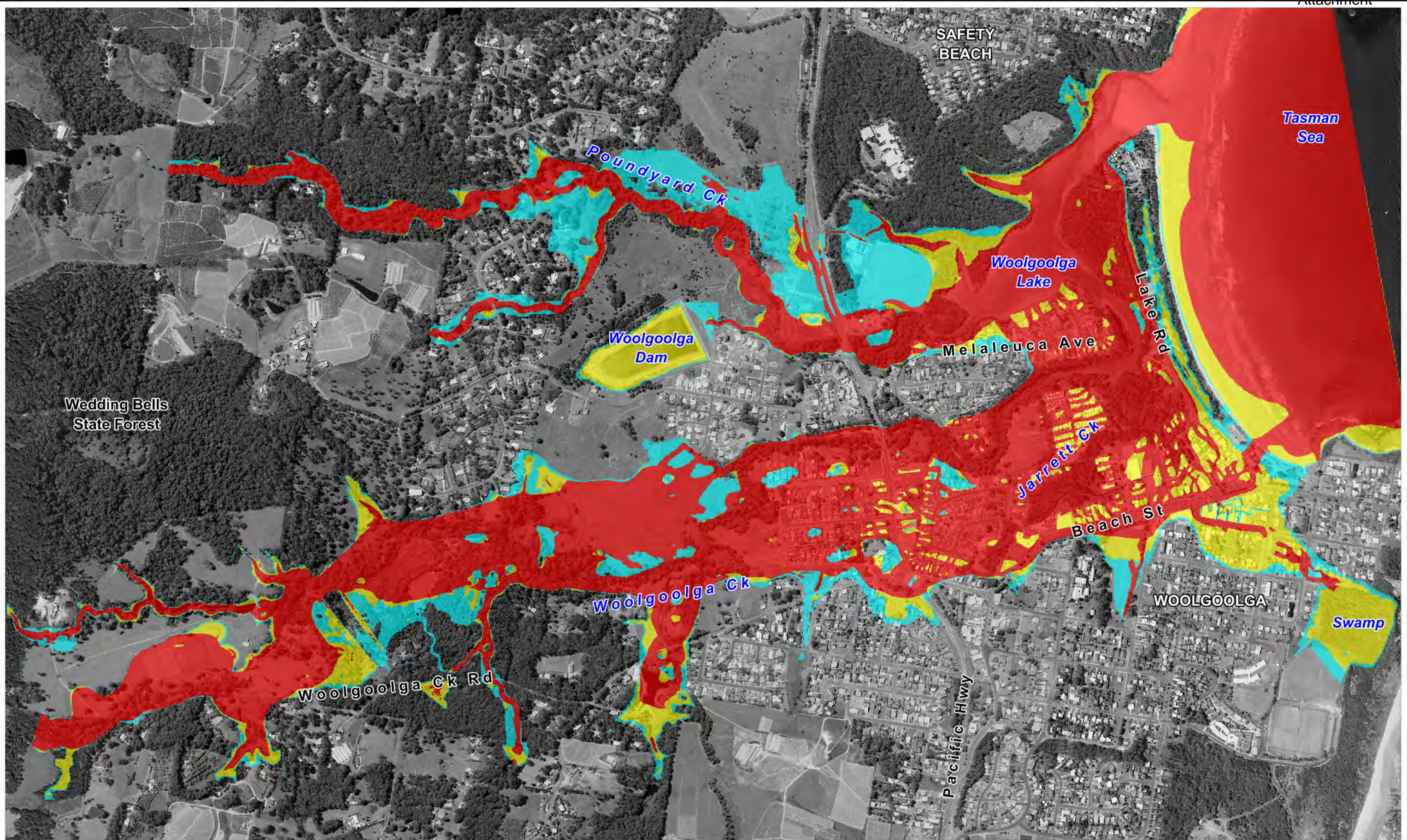
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LEGEND

Hydraulic Categorisation

■	Flood Fringe
■	Flood Storage (peak flood depth >0.5m at the PMF event)
■	Floodway (peak velocity * depth product >0.3 at the PMF event)

Title:
Woolgoolga Floodplain Risk Management Study
PMF Hydraulic Categorisation

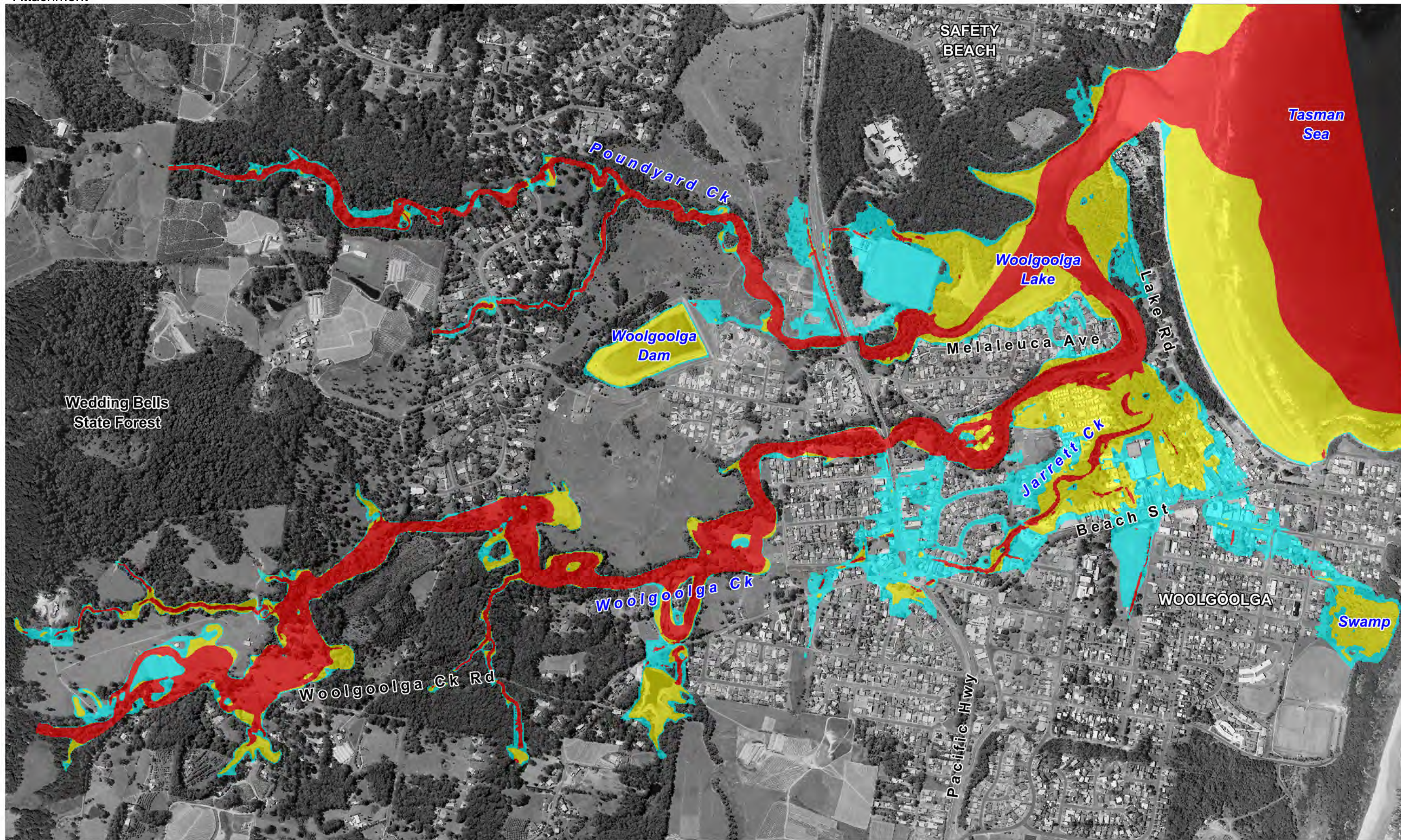
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LEGEND

Hydraulic Categorisation

- Flood Fringe
- Flood Storage (peak flood depth >0.5m at the 1% AEP event)
- Floodway (peak velocity * depth product >0.3 at the 1% AEP event)

Title:

**Woolgoolga Floodplain Risk Management Study
1% AEP with 2050 SLR Hydraulic Categorisation**

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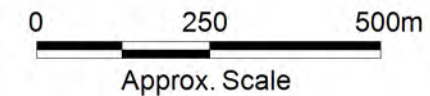
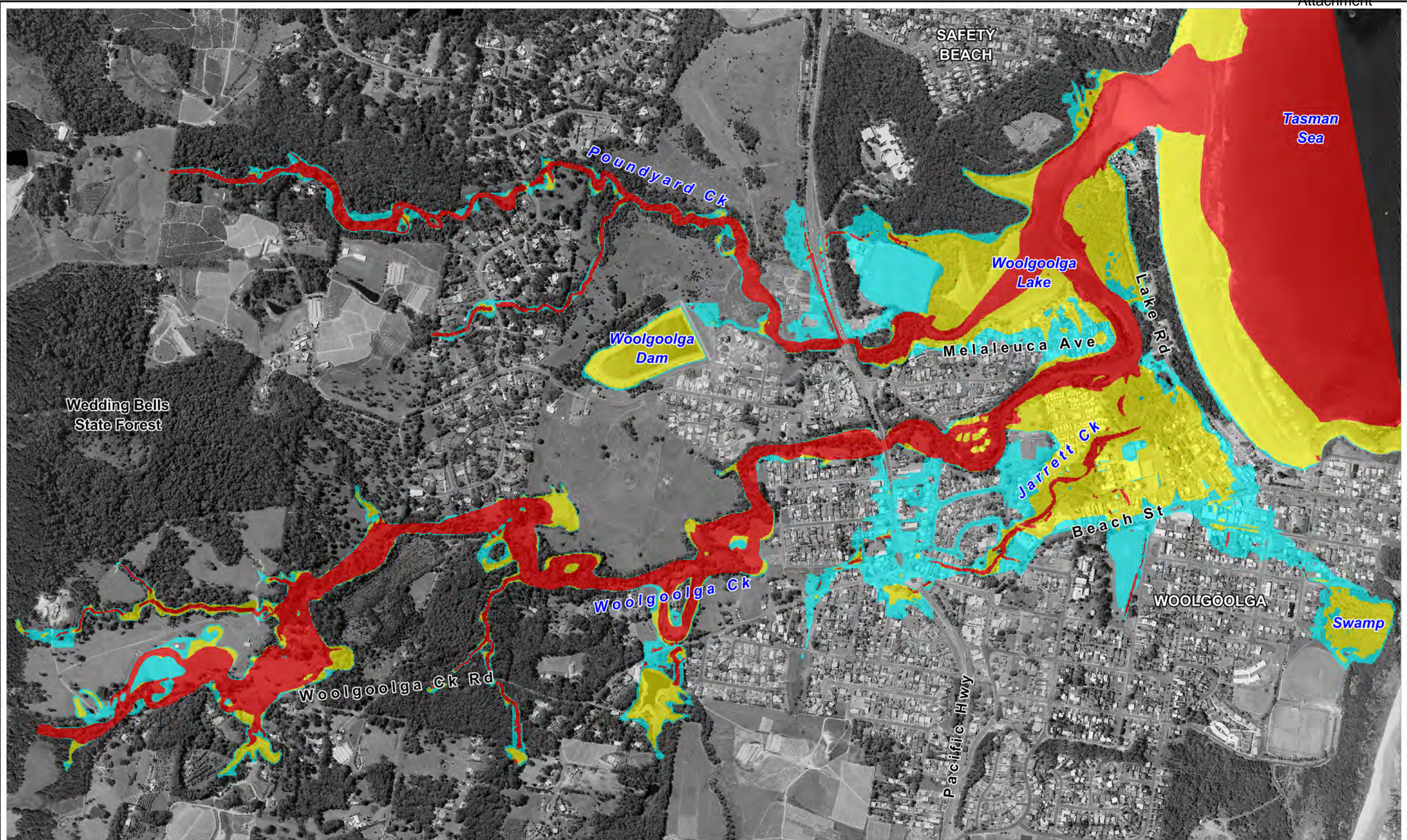


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LEGEND

Hydraulic Categorisation

- Flood Fringe
- Flood Storage (peak flood depth >0.5m at the 1% AEP event)
- Floodway (peak velocity * depth product >0.3 at the 1% AEP event)

Title:

Woolgoolga Floodplain Risk Management Study
1% AEP with 2100 SLR Hydraulic Categorisation

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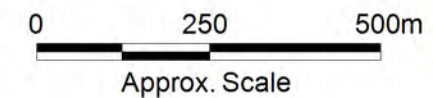
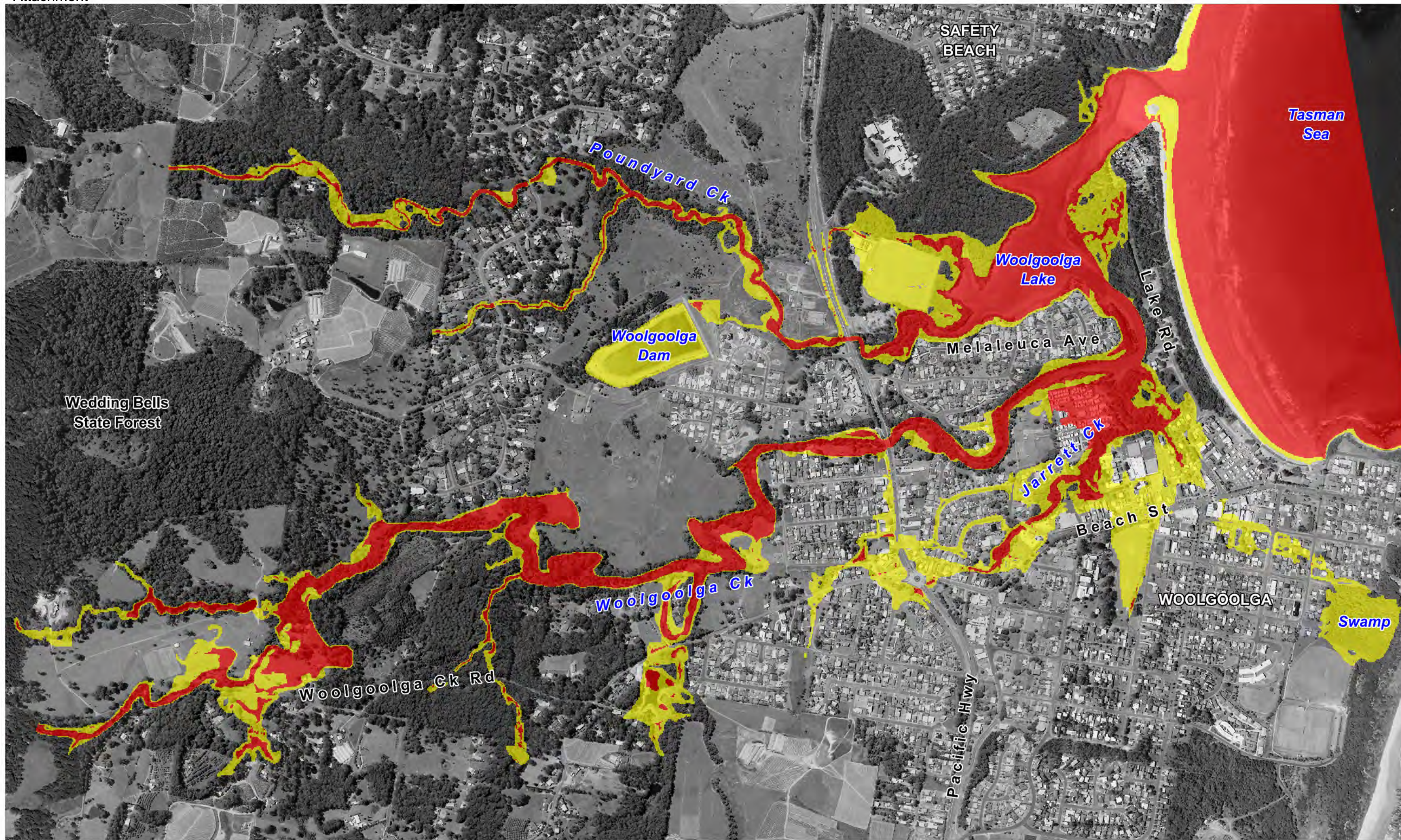


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LEGEND

Peak Flood Hazard

- low hazard
- high hazard

Title:

**Woolgoolga Floodplain Risk Management Study
20% AEP True Hazard Categorisation**

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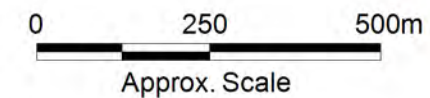


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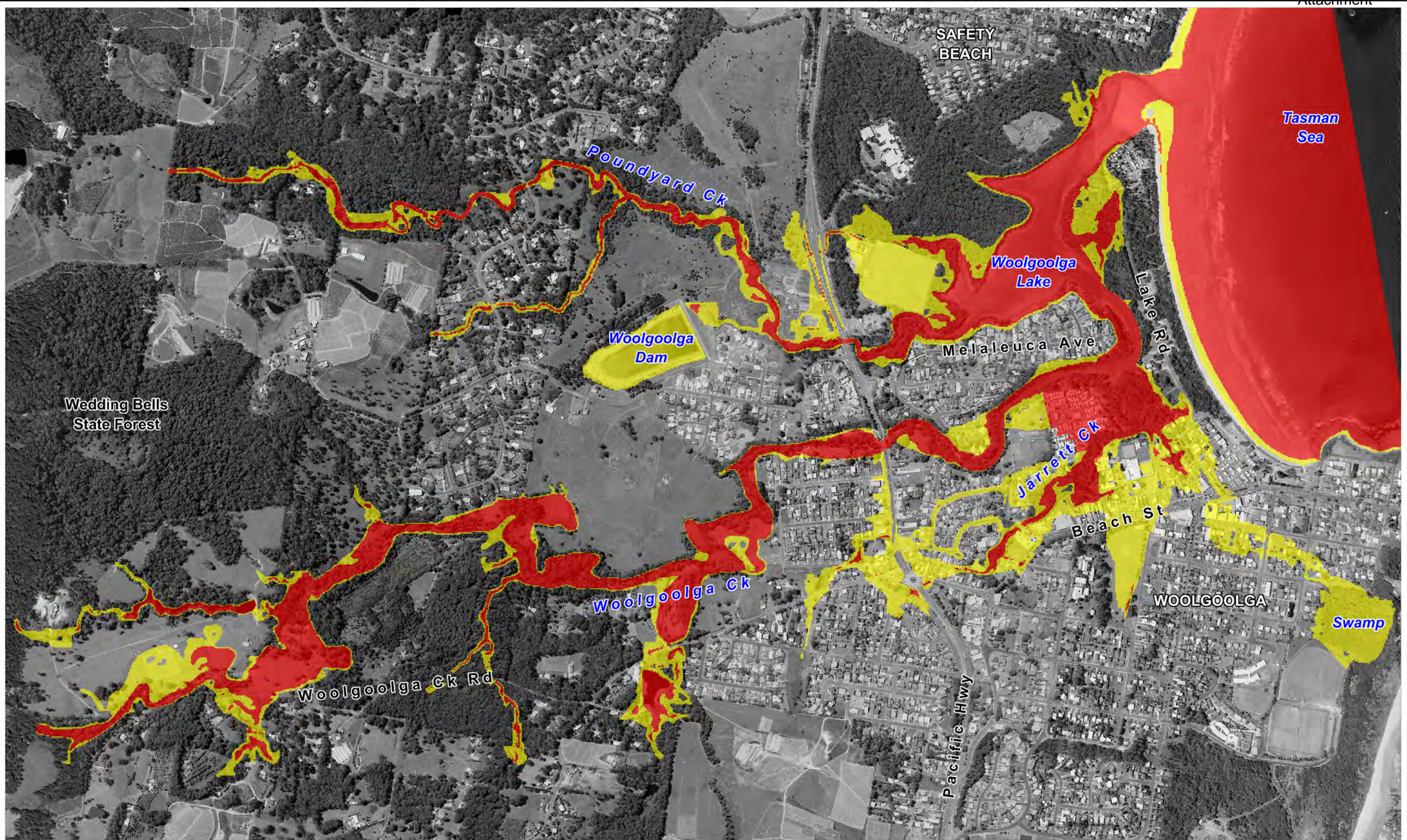
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LEGEND

Peak Flood Hazard

- low hazard
- high hazard

Title:

Woolgoolga Floodplain Risk Management Study
5% AEP True Hazard Categorisation

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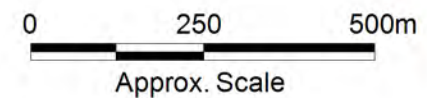
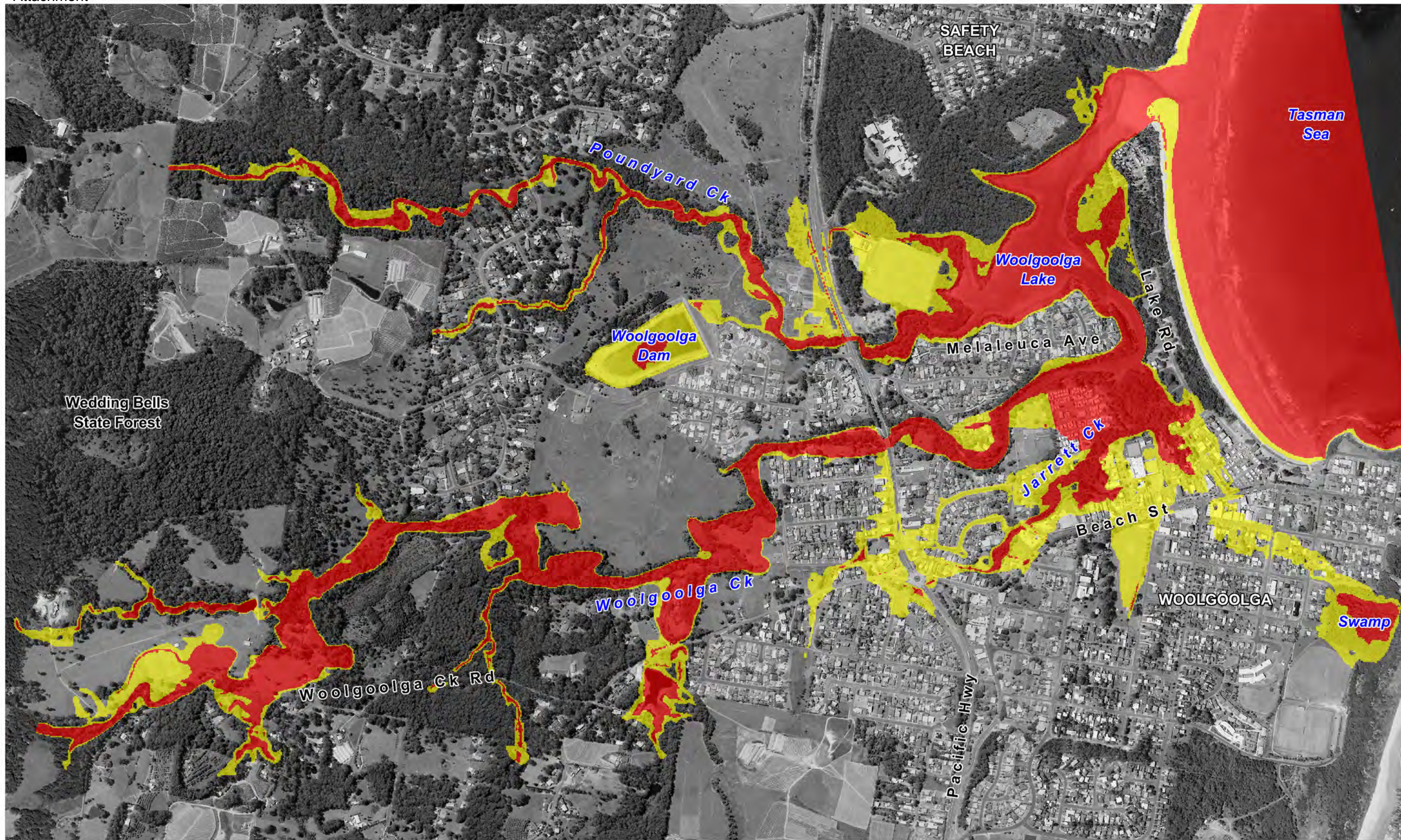


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LEGEND

Peak Flood Hazard

- low hazard
- high hazard

Title:

**Woolgoolga Floodplain Risk Management Study
2% AEP True Hazard Categorisation**

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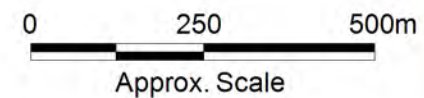


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LEGEND

- Peak Flood Hazard
- low hazard
 - high hazard

Title:

Woolgoolga Floodplain Risk Management Study
1% AEP True Hazard Categorisation

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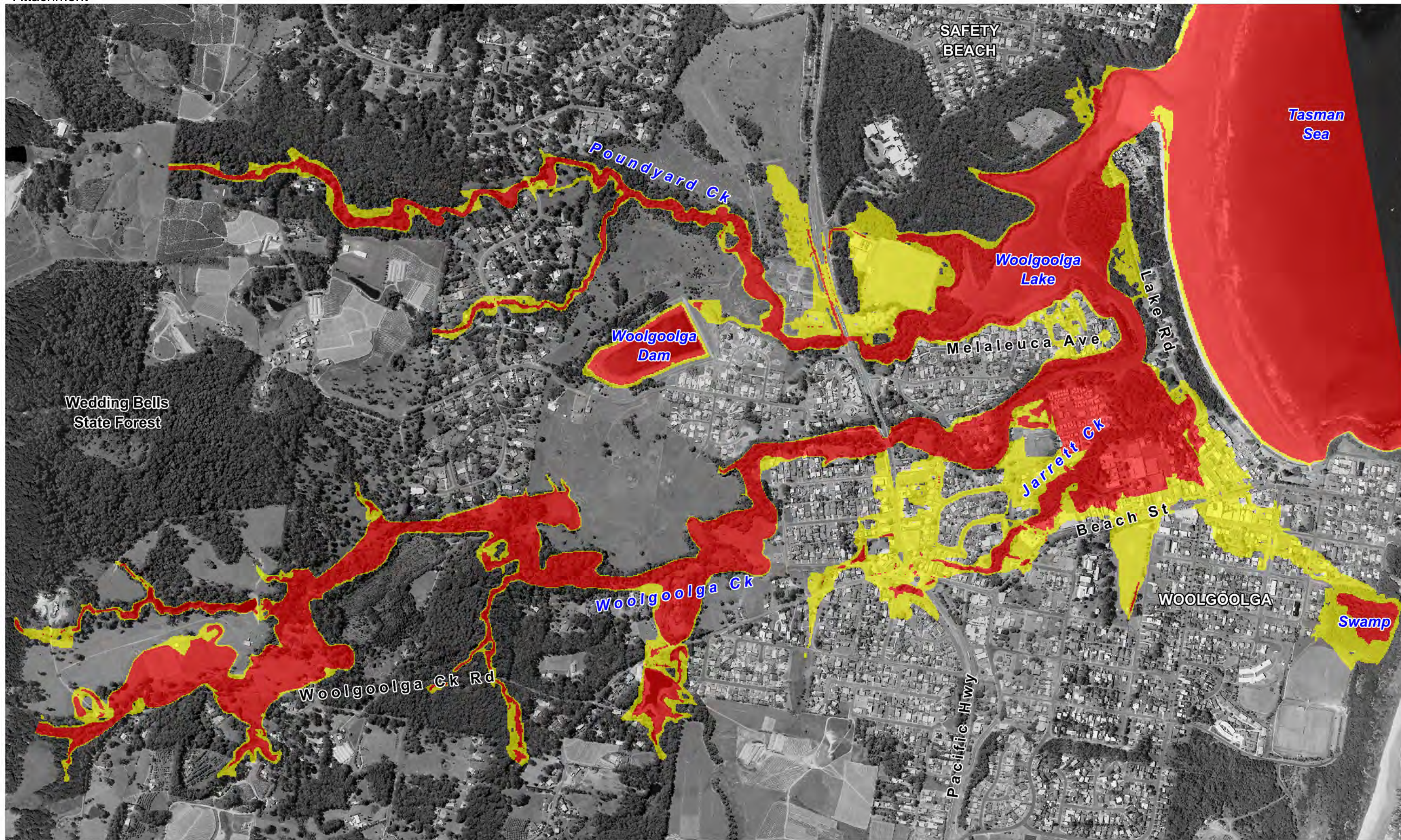
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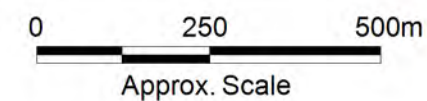
- Peak Flood Hazard
- low hazard
 - high hazard

Title:
Woolgoolga Floodplain Risk Management Study
0.2% AEP True Hazard Categorisation

Figure:
A-35

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LEGEND

- Peak Flood Hazard
- low hazard
 - high hazard

Title:

**Woolgoolga Floodplain Risk Management Study
PMF True Hazard Categorisation**

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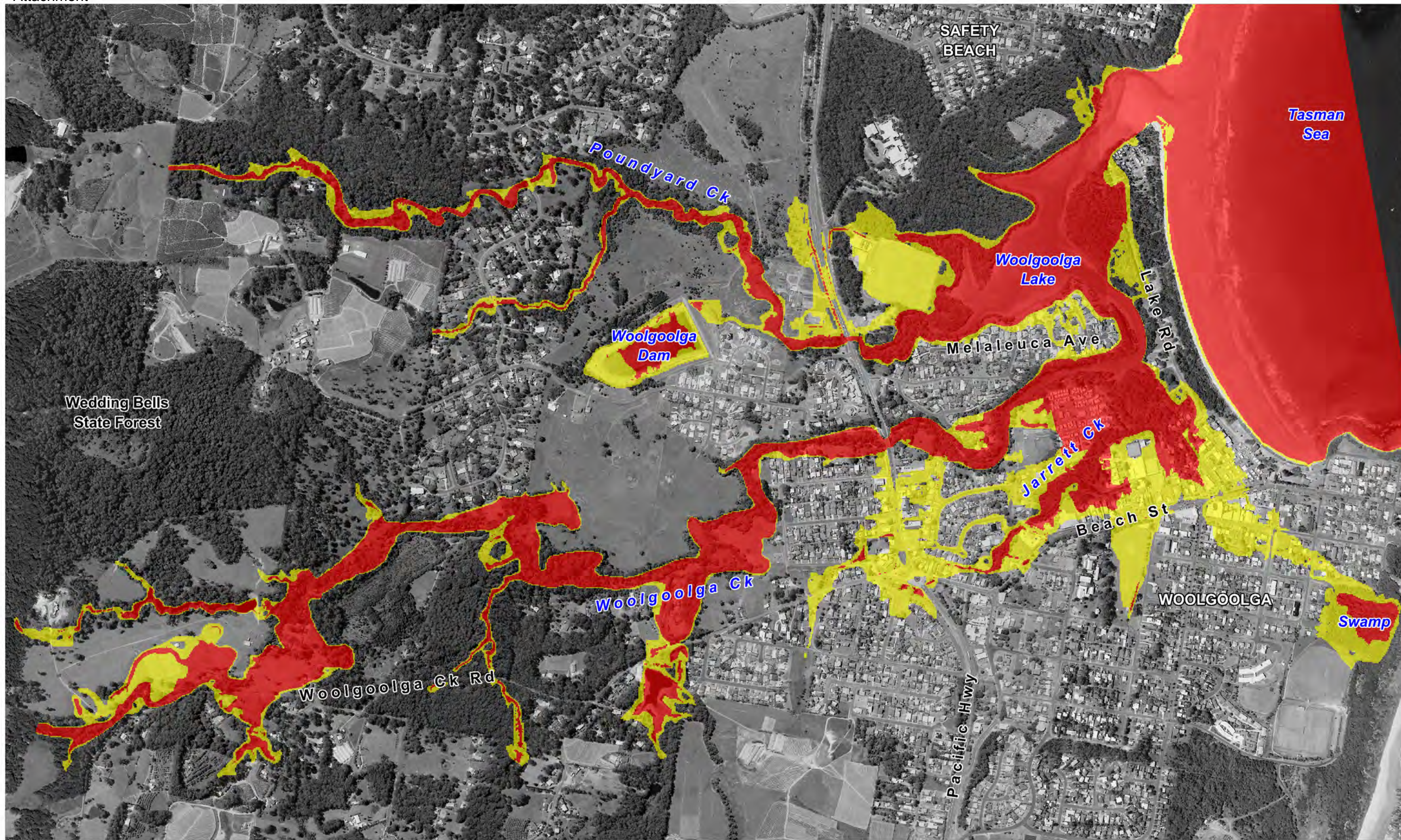
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LEGEND

Peak Flood Hazard

- low hazard
- high hazard

Title:

**Woolgoolga Floodplain Risk Management Study
1% AEP with 2050 SLR True Hazard Categorisation**

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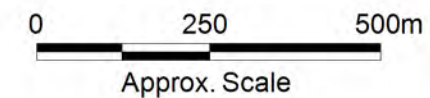


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LEGEND

Peak Flood Hazard

- low hazard
- high hazard

Title:

Woolgoolga Floodplain Risk Management Study
1% AEP with 2100 SLR True Hazard Categorisation

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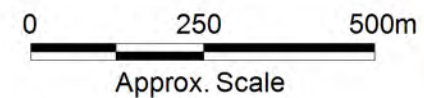
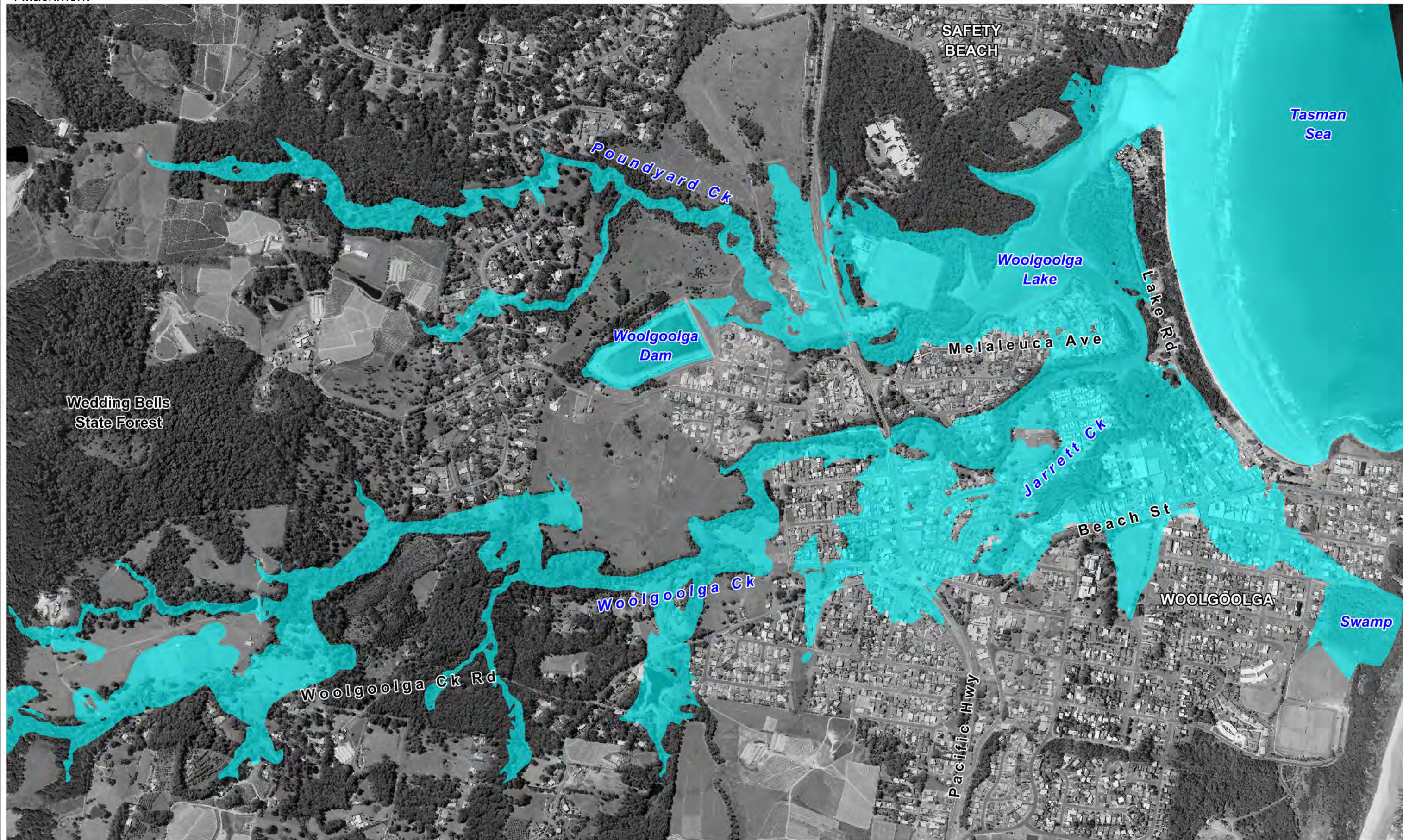


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LEGEND

 Flood Planning Area

Title:

**Woolgoolga Floodplain Risk Management Study
1% AEP Flood Planning Area**

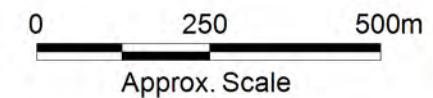
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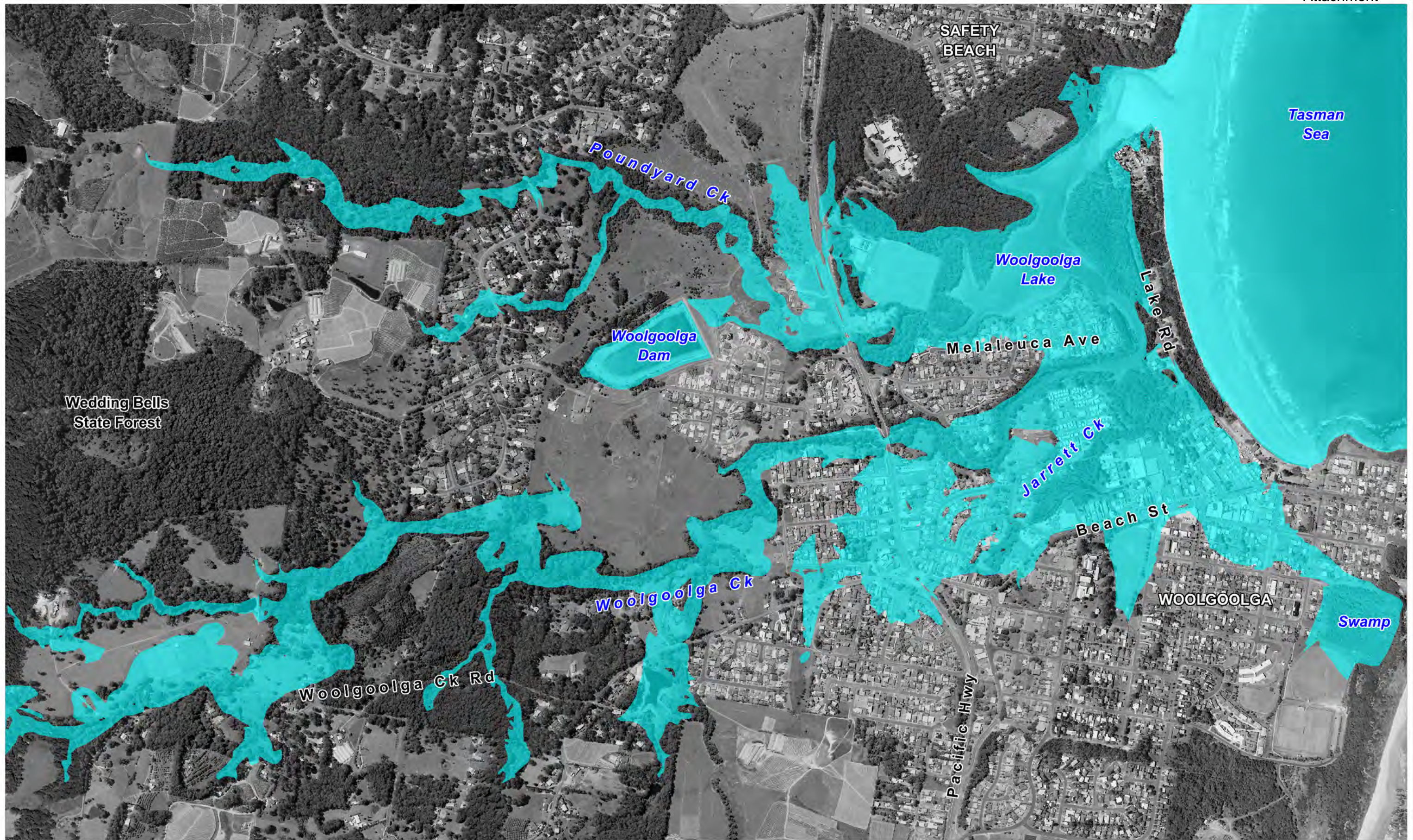
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LEGEND

 Flood Planning Area

Title:

Woolgoolga Floodplain Risk Management Study
1% AEP with 2050 SLR Flood Planning Area

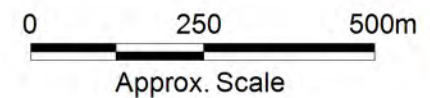
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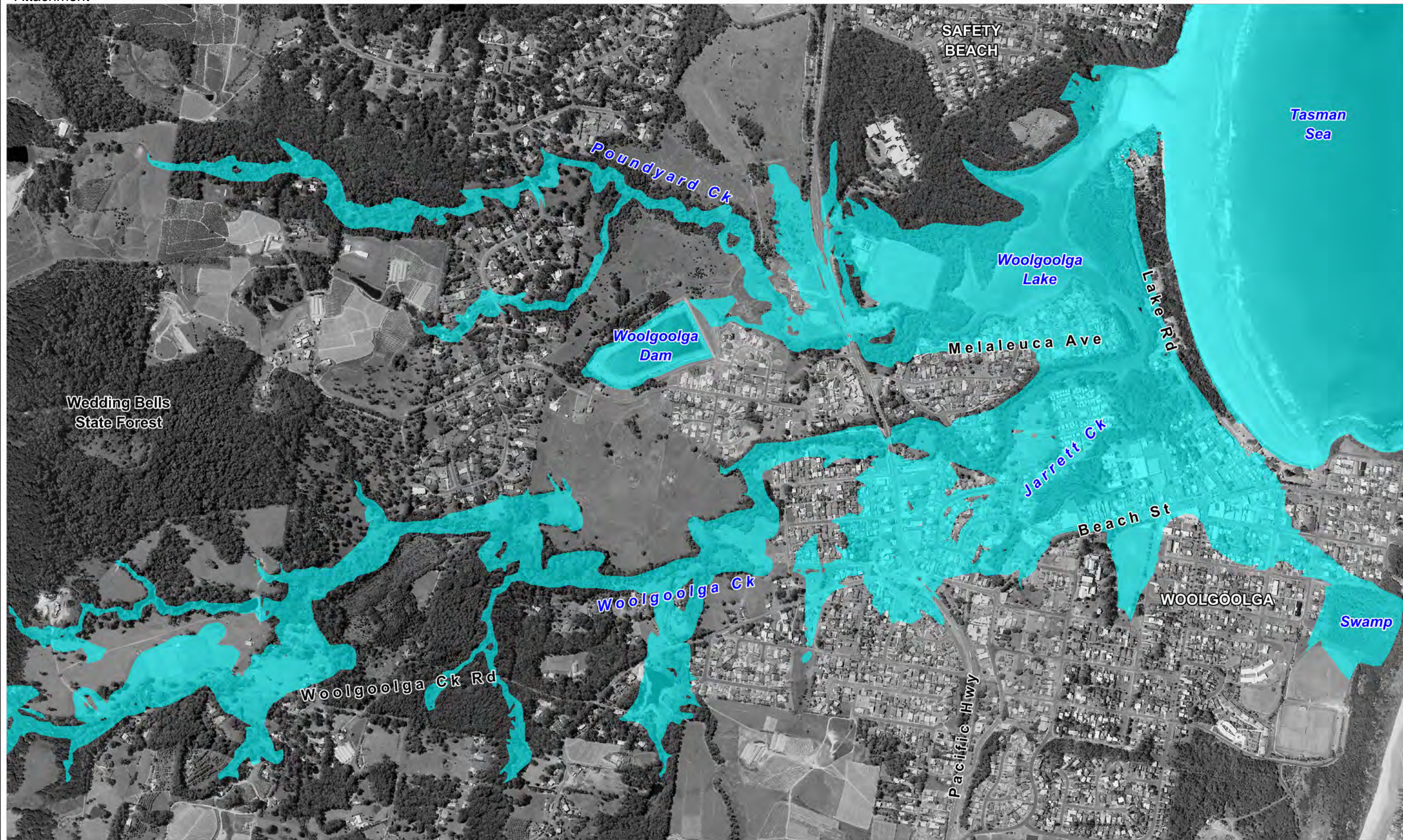
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LEGEND

 Flood Planning Area

Title:

**Woolgoolga Floodplain Risk Management Study
1% AEP with 2100 SLR Flood Planning Area**

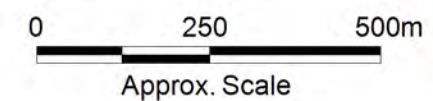
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Appendix B Community Consultation Material

Floodplain Risk Management Study and Plan Community Newsletter May 2014

What is the study about?

Coffs Harbour City Council is carrying out a Floodplain Risk Management Study and Plan for Woolgoolga.

This Study and Plan will be used to manage flood risk and damage within the towns floodplain which includes the Woolgoolga Creek, Jarrett Creek and Poundyard Creek tributaries.

The Floodplain Risk Management Study follows the completion of a Flood Study for Woolgoolga in 2012 – the first step in the floodplain management process.

Modelling and mapping from the 2012 study will be used as the basis for investigating impacts of flooding, possible flood mitigation options, and management of flood risks for existing and future development.

This work, in conjunction with community input will culminate in the development of the Floodplain Risk Management Study and Plan for Woolgoolga.

Who is responsible?

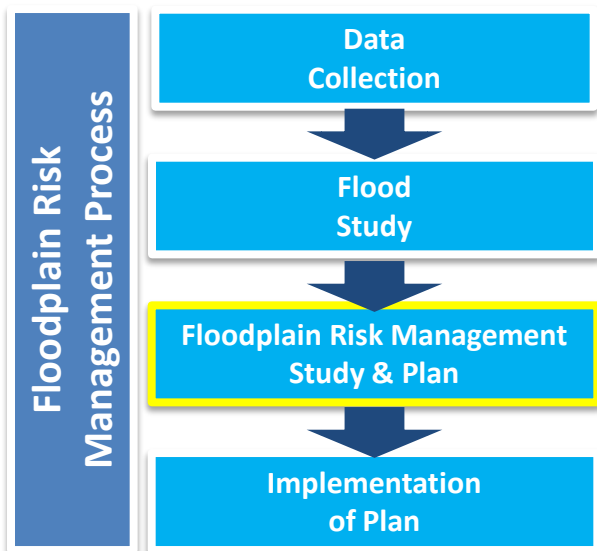
Coffs Harbour City Council will administer the project with input from the Floodplain Risk Management Committee. The Committee will oversee the study, providing regular input and feedback on key outcomes. The Committee has a broad representation including Councillors, Council Staff, State Government representatives, stakeholder groups and community representatives .

BMT WBM, an independent company specialising in flooding and floodplain risk management, will undertake the study.

The NSW Office of Environment and Heritage is providing financial and technical assistance.



Wharf Street January 2011



Key Study Outputs

Floodplain Risk Management considers the consequences of flooding on the community and aims to develop appropriate floodplain management measures to minimise and mitigate the impact of flooding. This incorporates the existing flood risk associated with current development, and future flood risk associated with future development and changes in land use.

The outcomes of the study provide the basis for the Floodplain Risk Management Plan, containing an appropriate mix of management measures and strategies, to help direct and coordinate the responsibilities of Government and the community in undertaking immediate and future flood management works and initiatives.

Information from the study will be used by the State Emergency Service (SES) during flood emergencies and will be used by Council to manage development in flood-affected areas.

Want more information?

For more information about the Woolgoolga Floodplain Risk Management Study and Plan, go to Council's website:

www.coffsharbour.nsw.gov.au/wfloodstudy
or please contact:

Coffs Harbour City Council

Mr Paul Sparke

Phone: 6648 4459

email: paul.sparke@chcc.nsw.gov.au

BMT WBM (Consultant)

Mr Daniel Williams

Phone: 4940 8882

email: Daniel.Williams@bmtwbm.com.au

Community input

Community involvement in managing flood risks is essential to improve the decision making process, to identify local concerns and values, and to inform the community about the consequences of flooding and potential management options.

A large amount of information relating to the June 2011 and January 2012 flood events was provided by the community and used within the Woolgoolga Flood Study. Many thanks to those who have previously contributed.

However, if you have information that was not previously provided then we would welcome receiving it during this study.

Information may include knowledge and experience about previous flooding history and existing flood problem areas. Photographs or video of recent flood events may also be provided. These will be copied and returned.

Additionally, there are further ways you can be involved in the study:

- Completing and returning the short questionnaire that accompanies this newsletter by Tuesday 27 May 2014.
- Attending **community information forums** planned during the study, to discuss community concerns and potential floodplain management options.

The first of these will be held at 7:00 pm on **Tuesday 3 June 2014** at the Woolgoolga Village Community Hall in Boundary St, Woolgoolga.



Turon Parade January 2011

Floodplain Risk Management Study and Plan Community Questionnaire May 2014

Your views and experiences are important to the study

Coffs Harbour City Council is carrying out a Floodplain Risk Management Study to manage flood risks in Woolgoolga associated with both catchment runoff and ocean flooding. This survey will help us to determine the flood issues that are important to you. Please take a minute or two to read through these questions and provide responses wherever you can. Please return form to the collection box at Woolgoolga Library or by post to BMT WBM, PO Box 266 Broadmeadow NSW 2292. Alternatively the questionnaire can be completed online at www.coffsharbour.nsw.gov.au/wfloodstudy

All information provided is confidential and used only for the purposes of the study. The **closing date** for return of the questionnaire is **Tuesday 27th May 2014**.

Contact and Property Details

Name:.....

Address:.....

Phone or email:.....

1. Please tick your type of property :

- House Unit/Flat/Apartment
 - Business Other (please specify)
-

2. How long have you been at this property?

..... Years

3. If this is a business, which best describes your type of property :

- Shop Community Building
 - Industrial Education Facility
 - Care Facility Other (please specify)
-

Previous Flooding Experience

4. Have you ever experienced flooding at this property?

- Yes No

If yes, what dates or years did this happen?

.....

5. Do you think your residence could be flooded above floor level in the future?

- Yes No

Flood Damage and Costs

6. Have you suffered any loss or costs due to flood damage?

- Yes No

If yes, did floodwater damage any of the following? (tick more than one if appropriate)

- Vehicles Carpet/flooring
- Furniture Electrical equipment
- Walls/ Building Stock / other goods

Did the floodwater inundate the main residence or just outbuildings such as a garage or sheds?

.....

.....

What was the approximate cost to you (at the time) from the damage caused by the flood ?

.....

.....

7. In previous flooding, did you or your employees (if a business) experience any of the following: (tick more than one if appropriate)

- Injury/health problem Unable to work
- Loss of trade Higher insurance
- Considered selling/moving

Protecting Your Property

8. In previous floods, what action did you take to protect your property against flood damage?

- None Used sandbags
- Moved Vehicles Lifted stock/equipment
- Other (please specify)
-
-

9. Are you aware of any works that has been carried out by either yourself, Council or the owner that you believe will reduce the flood problems at your property? (please tick more than one box if appropriate)

- Not aware of any measures
- Property built at specified floor level
- Property has been raised
- Flood compatible building materials used
- Stormwater pipe improvements
- Detention basins
- Other (please specify)
-
-
-

10. Are there any works that you think Council should consider to reduce the flood risk at your property?

- Yes No

If yes, please provide details.

.....

.....

.....

.....

Council Development Controls Attachment

11. What level of control do you consider Council should place on new development to minimise flood-related risks? (please tick more than one box if appropriate)

- The maximum possible level of control
- A fairly strict level of control
- A moderate level of control
- General advisory controls
- The minimum possible level of control
- Other (please specify)
-
-

12. What notifications do you consider Council should give about the potential flood affectation of individual properties?

- Advise every resident and property owner on a regular basis of the known potential flood threat
- Advise only those who enquire to Council about the know potential flood threat
- Advise prospective purchasers of property of the know potential flood threat

THANK YOU FOR YOUR ASSISTANCE IN COMPLETING THE SURVEY. PLEASE PROVIDE ANY ADDITIONAL INFORMATION YOU FEEL IS RELEVANT TO THE STUDY



BMT WBM Bangalow	6/20 Byron Street, Bangalow 2479 Tel +61 2 6687 0466 Fax +61 2 66870422 Email bmtwbm@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Brisbane	Level 8, 200 Creek Street, Brisbane 4000 PO Box 203, Spring Hill QLD 4004 Tel +61 7 3831 6744 Fax +61 7 3832 3627 Email bmtwbm@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Denver	8200 S. Akron Street, #B120 Centennial, Denver Colorado 80112 USA Tel +1 303 792 9814 Fax +1 303 792 9742 Email denver@bmtwbm.com Web www.bmtwbm.com
BMT WBM London	International House, 1st Floor St Katharine's Way, London E1W 1AY Email london@bmtwbm.co.uk Web www.bmtwbm.com
BMT WBM Mackay	PO Box 4447, Mackay QLD 4740 Tel +61 7 4953 5144 Fax +61 7 4953 5132 Email mackay@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Melbourne	Level 5, 99 King Street, Melbourne 3000 PO Box 604, Collins Street West VIC 8007 Tel +61 3 8620 6100 Fax +61 3 8620 6105 Email melbourne@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Newcastle	126 Belford Street, Broadmeadow 2292 PO Box 266, Broadmeadow NSW 2292 Tel +61 2 4940 8882 Fax +61 2 4940 8887 Email newcastle@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Perth	Level 3, 20 Parkland Road, Osborne, WA 6017 PO Box 1027, Innaloo WA 6918 Tel +61 8 9328 2029 Fax +61 8 9486 7588 Email perth@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Sydney	Level 1, 256-258 Norton Street, Leichhardt 2040 PO Box 194, Leichhardt NSW 2040 Tel +61 2 8987 2900 Fax +61 2 8987 2999 Email sydney@bmtwbm.com.au Web www.bmtwbm.com.au
BMT WBM Vancouver	Suite 401, 611 Alexander Street Vancouver British Columbia V6A 1E1 Canada Tel +1 604 683 5777 Fax +1 604 608 3232 Email vancouver@bmtwbm.com Web www.bmtwbm.com