# LIVING IN THE RICHMOND/ WINDSOR FLOODPLAIN

**DO YOU KNOW YOUR FLOOD RISK? ARE YOU PREPARED FOR FLOODS?** FIND OUT MORE AT WWW.SES.NSW.GOV.AU

# FLOODS. THE RISK IS REAL.

The Hawkesbury-Nepean Valley covers a wide area in Western Sydney from Bents Basin near Wallacia to the Brooklyn Bridge. The valley has a long history of dangerous and deep flooding. This is because floodwaters flow into the valley more quickly than they can flow out, causing them to back up. Heavy rain caused by an East Coast Low can lead to severe flooding in just a few days.

The March 2021 flood was only the 15th largest recorded flood in the region - though the impacts were felt far and wide. Floodwater severely impacted over 600 homes, over 30 caravan parks, hundreds of farms, and transport routes and essential services such as electricity were cut. The estimated damage bill was several hundred million dollars.

Floodwaters are also dangerous - they can be deeper and faster flowing than they seem, and full of hazardous materials such as toxic chemicals, sewage, broken building materials, sharp branches and wildlife (including snakes).

# **FLOODS CAN BE MUCH WORSE.**

There have been much larger floods in the valley including the worst flood on record. In 1867, river levels reached 19.1 metres above normal river height at Windsor and the region was devastated. (See page 4 for flood comparisons.) If a similar flood happened now the consequences would be catastrophic - many lives would be at risk and almost 90,000 people would have to evacuate.

Floods are random, naturally occurring events. It's impossible to predict when the next major flood will happen. History has shown that serious floods can happen many times in a single decade, and not again for many years.



Windsor hemmed in by floodwater, March 2021 flood. Source: Adam Hollingworth



Submerged properties at Gronos Point, March 2021 flood. Source: Adam Hollingworth





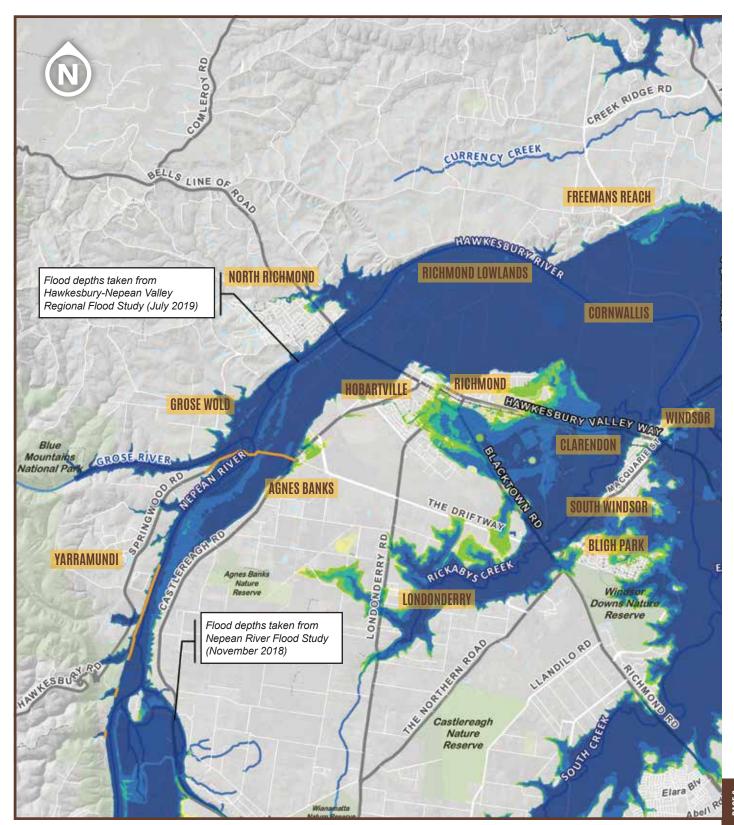


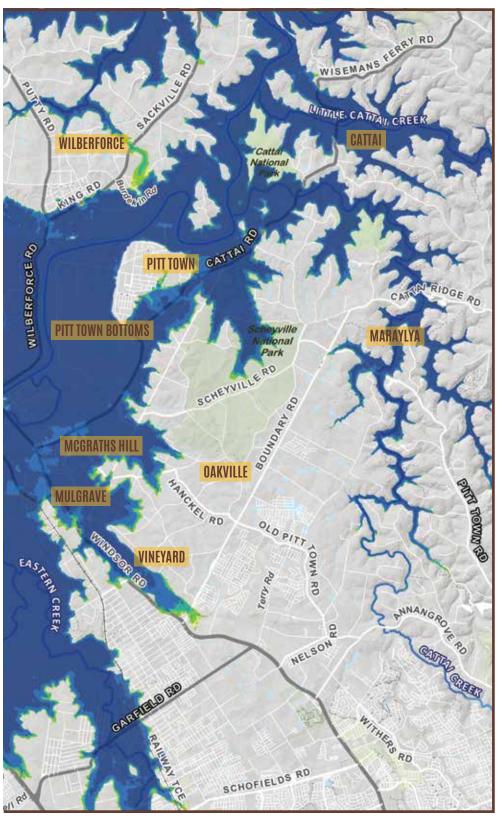
# RICHMOND/WINDSOR FLOODPLAIN.



THE MAP BELOW HIGHLIGHTS SUBURBS AT GREATEST RISK OF FLOODING FROM THE HAWKESBURY AND NEPEAN RIVERS. THE FIRST STEP TO BEING PREPARED FOR A FLOOD IS KNOWING YOUR FLOOD RISK.

THIS MAP SHOWS A FLOOD THAT HAS A 1 IN 500 OR A 0.2% CHANCE PER YEAR OF HAPPENING. THIS FLOOD HAS A 15% CHANCE OF HAPPENING IN AN 80-YEAR LIFETIME. IF YOUR SUBURB ISN'T LISTED, YOU COULD STILL BE AT RISK OF FLOODING.





# **MAP KEY**

2 - 4m

#### DEPTH OF FLOODING



Boundary between different sources of flood mapping.

>4m

Flood information sources: Area upstream of Yarramundi Bridge - Nepean River Flood Study (Advisian 2018, prepared for Penrith City Council). Used with permission. • Other flood information - Hawkesbury-Nepean Valley Regional Flood Study (WMAwater 2019, prepared for Infrastructure NSW).

The map shows flooding from the Hawkesbury-Nepean River system including backwater effects. It does not focus on local catchment or overland flooding - please contact your local council for this information.

# YOUR LOCAL AREA: IN THE FLOOD ZONE.

In a minor flood, the low-lying areas between Richmond and Pitt Town would be the most affected. During moderate floods, the Yarramundi, Windsor and North Richmond bridges are all likely to be closed.

In a larger flood, similar to the one in 1961, many hundreds of properties in McGraths Hill, South Windsor, Windsor and Pitt Town would be inundated. The Winsdor Road evacuation route would be cut, isolating McGraths Hill.

In a flood similar to the worst on record in 1867, vast areas of the floodplain would be affected, forming flood islands around Pitt Town and Windsor. Thousands of properties across the whole region would be flooded and there would be large-scale evacuations. Essential services such as electricity, gas, water and sewerage would be cut, including to some properties outside the floodplain. Many evacuation roads would also be cut off, including the Hawkesbury Valley Way.

#### **PROBABLE MAXIMUM FLOOD** LEVEL (PMF).

Very little land would remain above floodwater in the Richmond/Windsor floodplain in an extremely rare predicted height is based on flood

PMF. This modelling.

#### 1 IN 100 CHANCE **PER YEAR** FLOOD LEVEL.

Thousands of dwellings would be impacted across the floodplain, and McGraths Hill would be completely submerged. The Hawkesbury Valley Way evacuation route would be cut. This predicted height is based on flood modelling. This level is equivalent to 17.3 metres above mean sea level.

reaching above the first-floor balcony of the Doctor's House in Windsor. Hundreds of houses were flooded. Populations were forced onto small flood islands at Windsor, Richmond and Pitt Town.

1867 FLOOD

PEAK LEVEL.

European

settlement

Highest flood since

19.1m

# 26.1m

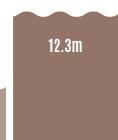
## 2020 FL00D PEAK LEVEL.

First moderate flood since 1992 Yarramundi, North Richmond and (old) Windsor bridges flooded, with significant disruption.



#### 1961 FLOOD 2021 FLOOD PEAK LEVEL. PEAK LEVEL. Highest flood in living memory.

Most recent major Hawkesbury River flood. Somé houses on the urban fringes were impacted. The 2021 flood is described as a 1 in 10-20 chance per year flood at Windsor.

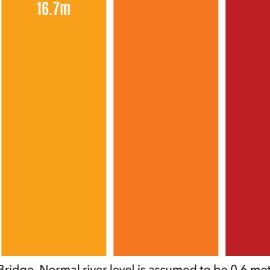


# Yarramundi Bridge swept downstream. 14.4m

Hundreds of

Windsor.

houses flooded in



These heights are relative to the normal river level at Windsor Bridge. Normal river level is assumed to be 0.6 metres on the Windsor gauge.

The information contained in this publication is based on knowledge and understanding at the time of compilation (August 2021). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date. NSW State Emergency Service takes no responsibility for the accuracy, currency, reliability and correctness of any information in the map (including, without limitation, any of the information provided by third parties) nor for the accuracy, currency, reliability and correctness of links or references to information sources with regard to the map. While all reasonable care has been taken in the compilation, to the extent permitted by law, NSW State Emergency Service and the State of New South Wales and its employees and agents exclude all liability for the accuracy or completeness of the information, or for any injury, loss, or damage whatsoever (including without limitation liability for negligence and consequential losses) suffered by any person acting, or purporting to act in reliance upon anything contained herein.

# GET PREPARED IN THE RICHMOND/WINDSOR FLOODPLAIN

THESE SIMPLE ACTIONS WILL HELP PREPARE YOUR HOUSEHOLD FOR FLOODS.
BEING PREPARED CAN SAVE LIVES.

## How to prepare for flood



- Bureau of Meteorology: local weather updates: Visit www.bom.gov.au or download the BOM app
- NSW State Emergency Service (NSW SES): information on floods and storms
   Visit www.ses.nsw.gov.au and on social media including Facebook www.facebook.com/NSW.SES
- ABC Radio: the official emergency broadcaster Listen at reception.abc.net.au and ABC Listen app

#### ✓ Prepare a Get Ready to Go kit

#### What to pack:

- 1. Health care items like medications and prescriptions
- 2. Copies of your important documents (hard copies or stored digitally)
- 3. Important valuables and momentos
- 4. Important phone numbers
- 5. Battery powered radio and torch
- 6. Clothing and personal items

#### ✓ Make a plan for evacuation

Know where you will go, how you will get there, what evacuation routes you can use, what you will do with your animals, and how you will manage your health

Visit www.ses.nsw.gov.au/yourfloodplan for more information and tips. Find how to plan for your animals here - www.getreadyanimals.nsw.gov.au

#### ✓ Share your plan

Talk with your relatives, friends, and neighbours about what you will do if you need to evacuate

# What to do during a flood



#### Follow NSW SES Flood Advice and Emergency Warnings

- Listen to your local ABC radio station for up to date flood information and advice
- Follow advice from NSW SES if you are asked to evacuate, don't wait until it is too late



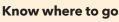
#### Take your emergency bag

 This should include your medications, prescriptions and any assistance equipment



#### Take your animals

• Put them on leads or in pet carriers





Follow advice on evacuations and check live traffic information. Visit **www.ses.nsw.gov.au** and **www.livetraffic.com** or the Live Traffic app



#### Look out for each other

Share information with family, friends, and neighbours and help each other or those who may need assistance

# **Key contact information**



www.ses.nsw.gov.au



138 737 for general enquiries



**132 500** for emergency assistance during a flood

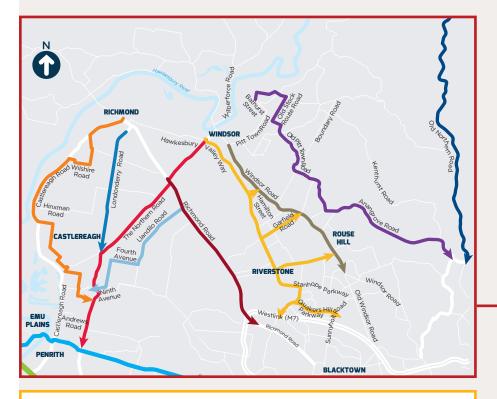


**000** for life threatening emergencies

# Your local evacuation routes

There are number of local flood evacuation routes in your area: Windsor Road, Northern Road, Londonderry Road, Castlereagh Road, and the 'South Creek route' which includes the Hawkesbury Valley Way and Riverstone Parade.

Know that routes can get cut during a flood. Always check for traffic updates before evacuating.



#### Legend

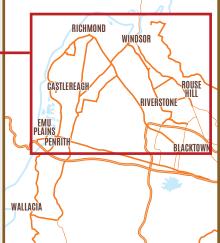
Castlereagh Road
South Creek route
Llandilo Road

Londonderry Road
Pitt Town Route

Richmond Road

The Northern Road

Windsor Road



#### FLOOD FORECASTS AND DECISIONS ABOUT EVACUATING

The Bureau of Meteorology (BOM) predicts flood heights for the Hawkesbury-Nepean River at river height gauges located along the river.

Using these predictions, the NSW State Emergency Service (SES) makes decisions about the need to issue flood evacuation warnings and orders to keep communities safe.

During a flood you need to respond to evacuation advice. If you do not, you risk getting trapped and being unable to leave safely.

The main river height gauges in your floodplain are Hawkesbury River at North Richmond and Hawkesbury River at Windsor (PWD) and information is automatically updated on the **BOM's website**.

## **Need help?**

For emergency help in floods call NSW SES on 132 500

In life threatening emergencies call Police/Ambulance on 000

- Hearing/speech impaired SMS NRS: 0423 677 767
- Internet Relay: https://internet-relay.nrscall.gov.au
- If you are homeless call Link2Home on 1800 152 152







www.ses.nsw.gov.au/yourfloodplan