# LIVING IN THE SOUTH AND EASTERN CREEKS 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 3 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.



South Creek looking east from Windsor, March 2021. Source: Adam Hollingworth



Submerged properties in Garfield Road West (Riverstone), March 2021 flood. Source: Spatial Services



AGE 1

# SOUTH AND EASTERN CREEKS FLOODPLAINS.

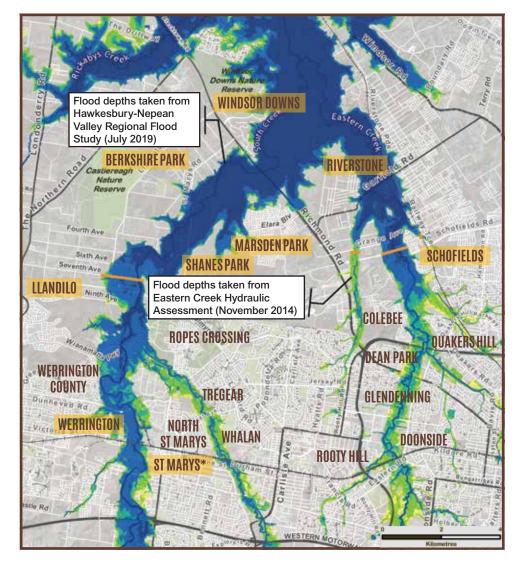


The map below highlights suburbs at greatest risk of flooding from the Hawkesbury River, South Creek and/or Eastern Creek.

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.

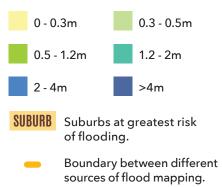
This flood has a 15% chance of happening in an 80-year lifetime.

If your suburb isn't listed, you could still be at risk of flooding.



## **MAP KEY**

#### DEPTH OF FLOODING



Limit of mapping

\* Small proportion of properties are flooded in low likelihood floods.

Flood information sources: South Creek floodplain upstream of Seventh Avenue - Updated South Creek Flood Study (Worley Parsons 2015, prepared for Penrith City Council). • Eastern Creek floodplain upstream of South Street - Eastern Creek Hydraulic Assessment (Catchment Simulation Solutions 2014, prepared for Blacktown City Council). • Other flood information - Hawkesbury- Nepean Valley Regional Flood Study (WMAwater 2019, prepared for Infrastructure NSW). • All this flood information is used with permission.

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

# YOUR LOCAL AREA: IN THE FLOOD ZONE.

When the Hawkesbury River is in flood, the floodwaters can back up from Windsor into South Creek and Eastern Creek, causing flooding in the suburbs alongside them.

In a big flood, the backwater flooding from South Creek would inundate properties in parts of Windsor Downs, Berkshire Park, Marsden Park, Shanes Park and Llandilo. The evacuation route along Richmond Road would be cut at the South Creek Bridge. At the same time, the backwater flooding from Eastern Creek would impact properties in parts of Riverstone and Schofields.

In a rare and extreme flood, the backwater flooding could extend even further upstream, into parts of St Marys and Werrington.

Local catchment flooding generated by heavy rain over the South and Eastern creeks catchments can cause severe impacts even without backwater effects from the Hawkesbury River.

#### creeks floodplains. This predicted height is based on 1961 FLOOD 19.1m flood modelling. (It is equivalent to PEAK LEVEL. 17.3 metres above **1988 FLOOD** 2021 FLOOD Highest mean sea level). PEAK LEVEL. Hawkesbury PEAK LEVEL. River flood in Severe local Most recent major living memory. catchment flooding Hawkesbury River About 100 homes 16.7m from South Creek, flood. Dwellings in flooded in with many homes South and Eastern **Riverstone** flooded in St Marys creeks floodplains area. Backwater were impacted flooding in from backwater Riverstone, forcing flooding. 14.4m evacuations. 12.3m 12.2m

**1 IN 100 CHANCE** 

dwellings would be

South and Eastern

PER YEAR

FLOOD LEVEL.

Hundreds of

impacted in the

## 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.

#### 1867 FLOOD Peak Level.

The highest Hawkesbury River flood since European settlement. Homes at Riverstone, Llandilo and Shanes Park were flooded to severe depths, and many people were rescued. PROBABLE Maximum flood Level (PMF).

In this extremely rare event, large areas adjacent to South Creek and Eastern Creek would be inundated. Backwater flooding could extend up to the M4 Motorway on South Creek and the M7 Motorway on Eastern Creek. This predicted height is based on flood modelling.

26.1m

PAGE 3

# GET PREPARED IN THE SOUTH AND EASTERN CREEKS FLOODPLAIN

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

# How to prepare for flood

#### Know where to get updates and warnings

- 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

#### Know where to go

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**

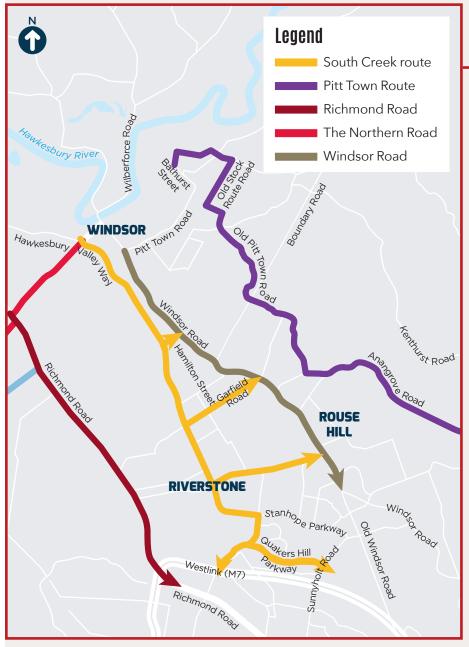
www.ses.nsw.gov.au
138 737 for general enquiries
132 500 for emergency assistance during a flood
000 for life

threatening emergencies

# Your local evacuation routes

There are a number of local flood evacuation routes: *Richmond Road, Northern Road, Llandilo Road, Windsor 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.

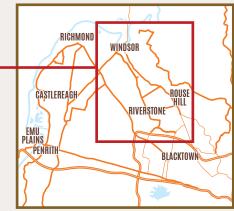


## **Need help?**

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: <a href="https://internet-relay.nrscall.gov.au">https://internet-relay.nrscall.gov.au</a>
- If you are homeless call Link2Home on 1800 152 152





### 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 main 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 South Creek at the Great Western Highway (for flows down South Creek) and Hawkesbury River at Windsor (PWD) (for backwater travelling up South Creek from the Hawkesbury River) and information is automatically updated on the **BOM's website**.

www.ses.nsw.gov.au/yourfloodplan