

SOURCES OF DATA FOR THE HAWKESBURY-NEPEAN VALLEY INTERACTIVE FLOOD MAPPING TOOL

JUNE 2020

| Area ¹ | | Flood chance / size | | | | |
|---|--|--|--|--|--|---|
| | | Very high chance (small flood) (1 in 5 chance per year) | High chance (large flood) (1 in 20 chance per year) | Medium chance (very large flood) (1 in 100 chance per year) | Low chance (huge flood) (1 in 500 chance per year) | Extremely low chance (probable maximum flood) |
| Wallacia floodplain ² (Nepean River between Bents Basin and Warragamba River junction) | | flood depths derived from flood level cross sections in the <i>Upper Nepean River Flood Study</i> (1995), using LiDAR dated 2017 | | | flood depths derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 | |
| Penrith/Emu Plains floodplain (Nepean River between Glenbrook Creek and Yarramundi Bridge) | | flood depths derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 ³ | flood depths derived from flood depth surface in the <i>Nepean River Flood Study</i> (2018) | | | flood depths derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 ⁴ |
| Richmond/Windsor floodplain | | flood depths derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 | | | | |
| South Creek Catchment floodplain | Local catchment flooding ^{5,6} | no flood information available for South Creek local catchment flooding for this flood likelihood | upstream of St Marys Road/Stony Creek Road, flood extents from <i>Updated South Creek Flood Study</i> (2015) | upstream of Mayo Road, flood extents from <i>Updated South Creek Flood Study</i> (2015) | upstream of Seventh Avenue, flood extents from <i>Updated South Creek Flood Study</i> (2015) | upstream of Main Western Railway on South Creek and Forrester Road on Ropes Creek, flood extents from <i>Updated South Creek Flood Study</i> (2015) |
| | Regional backwater flooding ⁶ | downstream of any mapped local catchment flood extents, flood depths derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 | | | | |
| Eastern Creek Catchment floodplain | Local catchment flooding ⁶ | upstream of about Sydney Street, flood extents from <i>Eastern Creek Hydraulic Assessment</i> (2014) | upstream of about Garfield Road West, flood extents from <i>Eastern Creek Hydraulic Assessment</i> (2014) | upstream of about Schofields Road, flood extents from <i>Eastern Creek Hydraulic Assessment</i> (2014) | upstream of about Schofields Road, flood extents from <i>Eastern Creek Hydraulic Assessment</i> (2014) | upstream of about M7 Motorway, flood extents from <i>Eastern Creek Hydraulic Assessment</i> (2014) |
| | Regional backwater flooding ⁶ | downstream of mapped local catchment flood extents, flood depths derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 | | | | |
| Lower Hawkesbury floodplain | | flood depths or extents derived from flood level surface in the <i>Hawkesbury-Nepean Valley Regional Flood Study</i> (2019), using LiDAR dated 2017 (dated 2011 downstream of Wisemans Ferry) | | | | |

SOURCES OF DATA FOR THE HAWKESBURY-NEPEAN VALLEY INTERACTIVE FLOOD MAPPING TOOL

JUNE 2020

Notes:

- ¹ Displayed flood information for any areas not explicitly described in the table is derived from the *Hawkesbury-Nepean Valley Regional Flood Study* (2019).
- ² Flooding at Wallacia is complex due to the joint probability of flooding from the Nepean and Warragamba Rivers. Following the recommendation of the *Hawkesbury-Nepean Valley Regional Flood Study* (2019), until further investigations are undertaken, the mapping presented here is based on the higher flood levels from either the *Upper Nepean River Flood Study* (1995) or the Regional Flood Study, where information for the same event is available from both studies.
- ³ For Penrith Lakes, no flood information is presented for this flood likelihood.
- ⁴ For Penrith Lakes, only a flood extent is presented for this flood likelihood, derived from the *Nepean River Flood Study* (2018).
- ⁵ Flood extents upstream of Elizabeth Drive are not presented.
- ⁶ The boundary between Hawkesbury River backwater flooding and local catchment flooding varies with flood likelihood – being further up South and Eastern creeks with rarer, larger Hawkesbury River floods.

References:

- Advisian (2018). *Nepean River Flood Study*, prepared for Penrith City Council, November 2018.
- Catchment Simulation Solutions (2014). *Eastern Creek Hydraulic Assessment*, prepared for Blacktown City Council, November 2014.
- Lyll & Macoun Consulting Engineers (1995). *Upper Nepean River Flood Study*, prepared for Department of Land and Water Conservation, September 1995.
- WMAwater (2019). *Hawkesbury-Nepean Valley Regional Flood Study*, prepared for Infrastructure NSW, July 2019.
- Worley Parsons (2015). *Updated South Creek Flood Study*, prepared for Penrith City Council, January 2015.

All this flood information is used with permission.