# Natural hazard – Flood

**Focus:** Students investigate the causes and impacts of and responses to a flood event (a hydrological hazard) in the Hawkesbury-Nepean Catchment

* Prediction of the impact of climate change on the occurrence, frequency and extent of this type of hazard
* Discussion of management strategies to reduce the future impact of similar hazard events

NSW State Emergency Service (SES) states;

The Hawkesbury-Nepean Valley has some of the most dangerous floods in Australia. The last major flood was in 1990. Five of the biggest floods in the past 150 years have occurred since 1961. Most floods have occurred after a period of drought. It’s important you understand your flood risk and learn how to prepare. Talk to your family and friends about your plans.

Students view the bathtub effect video  
<https://www.ses.nsw.gov.au/hawkesbury-nepean-floods/>

Discuss as a class the infographic and the reasons for flooding  
<http://www.infrastructure.nsw.gov.au/media/1525/hnvflooding_factsheet_feb2018.pdf>

Students in pairs complete the following table using the map and table from the NSW SES site –   
Select a flood likelihood map – <https://www.ses.nsw.gov.au/hawkesbury-nepean-floods/>

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| Place/Suburb/Location | Depth and extent of flooding in metres and area for **high** likelihood (98% chance of happening once in an 80-year life time). | Depth and extent of flooding in metres and area for **medium** likelihood (55% chance of happening once in an 80-year life time). | Depth and extent of flooding in metres and area for **low** likelihood  (15% chance of happening once in an 80-year life time). |
| Bligh Park |  |  |  |
| Pitt Town |  |  |  |
| McGraths Hill |  |  |  |
| Cranebrook |  |  |  |
| Emu Plains |  |  |  |
| Windsor Downs |  |  |  |