

# FLOOD INFORMATION FOR YARRALUMLA CREEK

## OVERVIEW

Yarralumla Creek is one of eight main water catchments in the ACT. Catchments are areas, usually bounded by hills, where the rain drains into the soil and streams and feeds into a river, creek or drainage line. In Canberra's past, many natural waterways were converted into the familiar concrete storm drain channels as new areas of the city were developed.

Yarralumla Creek runs through the southern suburbs of Canberra. The catchment extends from the Wanniasa Hills Nature Reserve, flowing northwards to meet the Molonglo River downstream of Scrivener Dam. The catchment covers approximately 34 square kilometres and spans approximately 10 kilometres north-south and 4 kilometres east-west.

The catchment has been significantly altered from its original natural condition, and is generally regarded as a fully developed urban environment. The Yarralumla creek catchment is within the Woden Valley district and contains a high density residential/commercial sector at Phillip, including the Woden Town Centre. Residential development started in the late 1960s and was largely complete by the mid to late 1970s. However, substantial infill and redevelopment has taken place over the last 30 years.

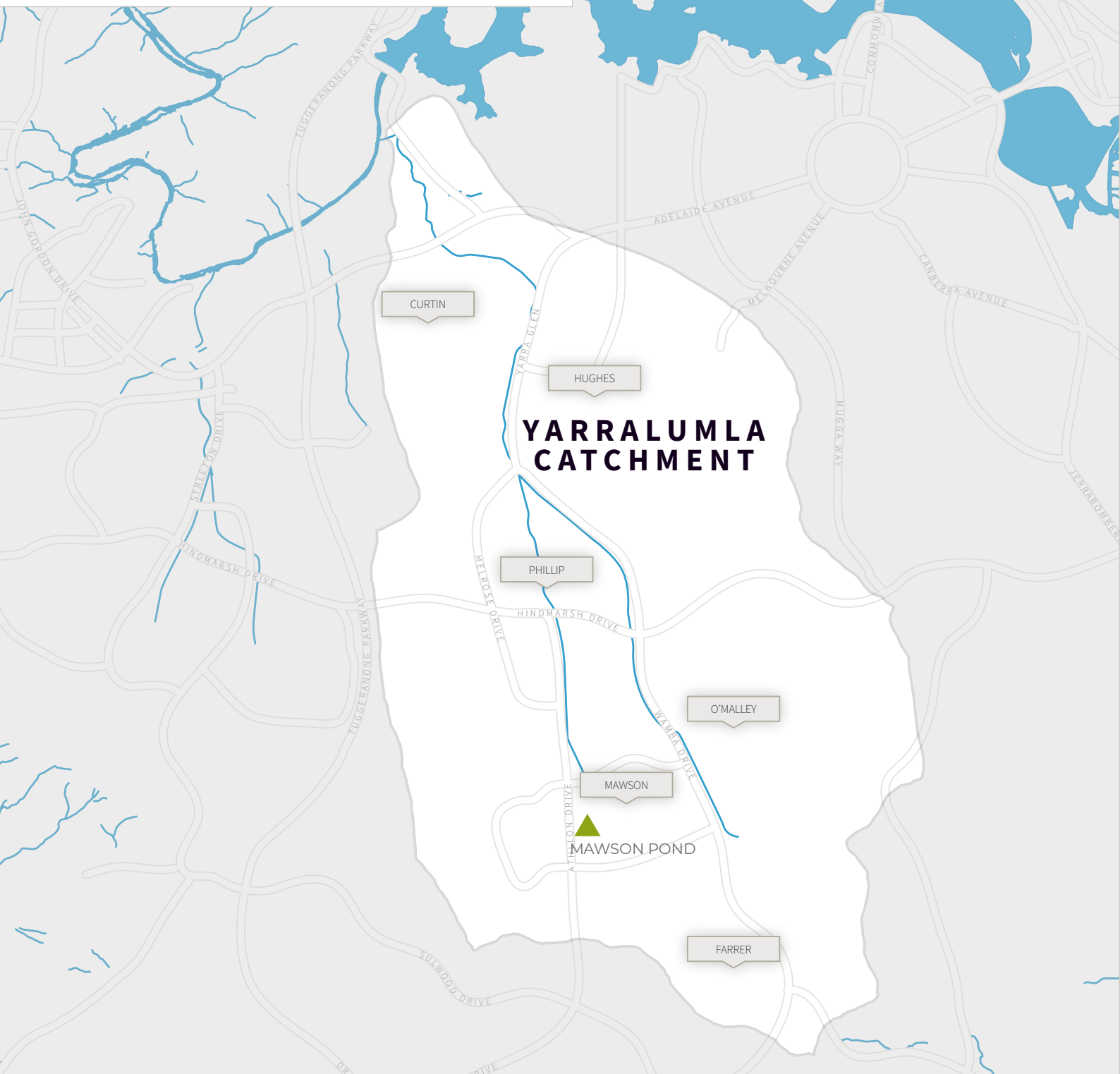
This information sheet outlines information about past and potential flooding for the catchment and what is being done to mitigate the risk of flooding. The risk of flooding in Canberra is low.



ARMoured CHANNELS, MAWSON



TRASH RACK, CURTIN





# FLOOD INFORMATION

Every catchment has its own character, which determines how water flows. This is critical during storms that may lead to flooding. The ACT Government has re-assessed predicted flood paths and flood levels for catchments in the ACT using flood studies based on current industry standards.

Flood maps have been developed for each catchment and reviewed by independent experts for accuracy. The maps highlight flow paths, flood depth and the potential hazard posed by floodwaters arising from Canberra's channels, creeks and rivers. This mapping is complemented by this information sheet and a list of questions and answers web link. The updated maps show the areas which could be affected by flooding from waterways in Canberra during a major flood event, known as a 1% Annual Exceedance Probability (AEP) flood. This means that in any given year there is a 1% chance of this type of flood occurring.

See the maps and accompanying information at the ACT Government's ACTmapi website: [www.actmapi.act.gov.au](http://www.actmapi.act.gov.au).



ARMOURED CHANNEL, WODEN

## FLOOD HISTORY

On Australia Day 1971, seven people were tragically drowned during an extreme storm in the upper catchment. Most victims were swept into Yarralumla Creek at a temporary low level creek crossing that was in place while Woden Valley was being urbanised. The crossing was subsequently replaced by the Yarra Glen roundabout and associated bridges, which were built to accommodate a major flood based on the best information available at the time.

CARRUTHERS STREET BIKE PATH, CURTIN



The Yarralumla Creek catchment has experienced relatively frequent flooding over the last ten years, with significant events in 2005, 2007, 2011 and 2014. The catchment's topography, density of urban development and relatively small area leave it prone to localised flooding. Such flooding occurs in response to intense, short duration storms; the resultant flooding can be characterised by fast flowing flood water in and around the creek channel. These events allow minimal warning time, often less than six hours, between the onset of rainfall and the arrival of the flood peak.

## FLOOD MAPS AND AFFECTED AREAS

The new flood maps specifically focus on a potential 1% AEP flood on existing waterways. As explained, there is a 1% chance that such a flood will occur in any given year. The maps show the predicted extent, depth and hazard potential of a 1% AEP flood event. Modelling undertaken as part of the Yarralumla Creek Flood Study indicates that the 1% AEP flood event is likely to be largely contained by the creek's channels, culverts and bridges. However there will be limited flooding of some areas adjacent to the channels. If flooding does occur outside of the channels, flood depths are generally expected to be shallow (below 0.5 metre).

For the 1% AEP flood event, there is the potential of low level flooding along some sections of Mawson Shopping Centre, Melrose Drive, Hindmarsh Drive, Yamba Drive, Mawson District Playing fields and the Equestrian Park in North Curtin.

Please refer to the flood extent map for Yarralumla Creek on ACTmapi for the specific details of potential riverine flooding in this catchment.

## MITIGATION WORKS

The existing Yarralumla Creek channels and floodways were designed based on the best information available at the time of construction to allow the flow of the a major flood event without inundating properties or roads. The new flood maps show that this is achieved, except for the locations listed above.

Under the Territory Plan, the Water Sensitive Urban Design (WSUD) code outlines planning rules for reducing the impact of stormwater through the management of water quality and quantity.

The rules are designed so that run-off created by new development does not have an adverse impact on stormwater systems or downstream environments.

## FIND OUT MORE

- For flood maps for this catchment please visit [www.actmapi.act.gov.au](http://www.actmapi.act.gov.au).
- For more information about riverine flooding in Canberra, please visit <http://www.environment.act.gov.au/water/riverine-flood-maps>.
- For information including flood forecasts, road closures and advice on evacuation and property protection, please visit the ACT Emergency Services website at [www.esa.act.gov.au](http://www.esa.act.gov.au).
- For specific information relating to what to do during a flood event or preparing your house for a flood event please call the local ACT SES on 13 22 81.

ARMoured CHANNEL, CURTIN

