

FLOOD INFORMATION FOR MOLONGLO RIVER

OVERVIEW

The Molonglo River 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.

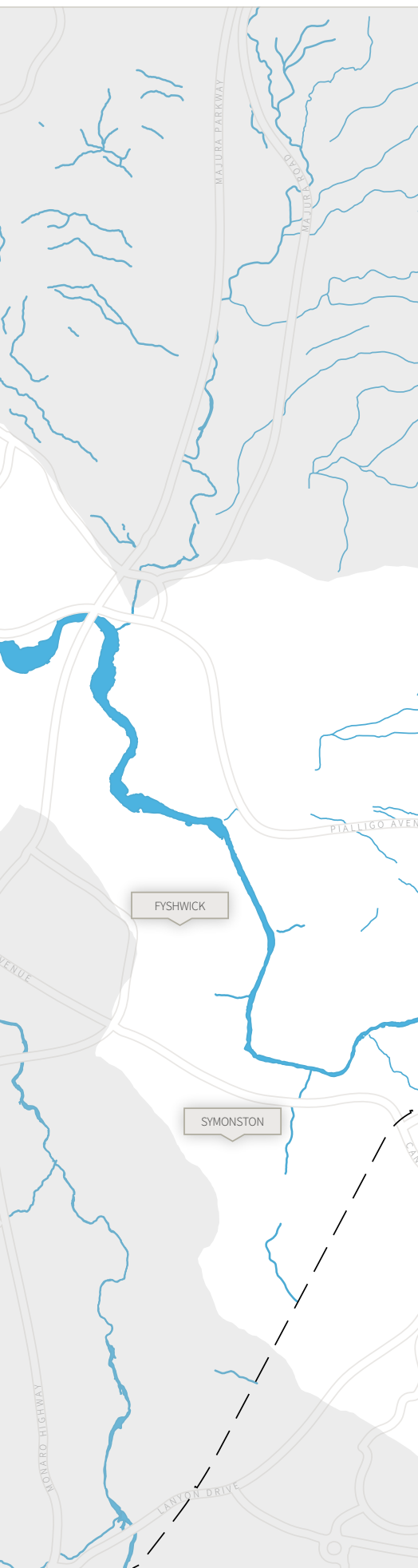
The Molonglo River originates in NSW, flowing from the western slopes of the Great Dividing Range, near an area known as Wild Cattle Flat. It flows north-west through Queanbeyan, where it is joined by the Queanbeyan River, and continues through central Canberra to the Murrumbidgee–Molonglo River junction west of the city.

The catchment covers approximately 1870 square kilometres. Most of the catchment is rolling hills with some larger mountain ranges in the southern sections. Much of the catchment is rural and forested areas, with more than 50% of the catchment used for pasture, with concentrations of medium and high density urban development including central Canberra and the Parliamentary Triangle. The area downstream of Lake Burley Griffin is Molonglo, a major future development area for residential development over the next 30–40 years.

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

SCRIVENER DAM





MOLONGLO RIVER OAKS ESTATE ROAD



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.

FLOOD HISTORY

The Molonglo River has experienced major flooding since Canberra was selected as the site for the national capital. The largest flood was in 1925, before Lake Burley Griffin was constructed in 1963. Other major floods occurred in 1956, 1974, 1976, 1988, 2010 and 2012. Two floods occurred in 1978 during construction of Googong Dam. The catchment's large size and predominantly rural nature means flooding occurs in response to large storm cells with long duration storm events. These events normally allow reasonable warning time, often more than 24 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 an AEP 1% flooding event. The latest modelling shown in these maps indicates that the 1% AEP flood event is generally likely to be contained by the channels, culverts and bridges, with limited flooding of surrounding areas. If flooding does occur outside of the channels flood depths are generally expected to be shallow (below 0.5 metre). However, the maps show that in some places the speed of water flow during a flood would be high, creating potentially hazardous conditions.

For the 1% AEP flood event, there is the potential of flooding along some sections of Oaks Estate and Oaks Estate Road. Please refer to the flood extent map for Molonglo Creek on ACTmapi for the specific details of potential riverine flooding in this catchment.

MITIGATION WORKS

Five flap gates on Scrivener Dam (on Lake Burley Griffin) operate during major flood events to maintain a constant lake level in the lake's Central Basin, even during a 1% AEP flood event. The National Capital Authority maintains a comprehensive flood monitoring and forecasting system for Lake Burley Griffin.

Flood containment is also provided by Googong Dam on the Queanbeyan River. Although primarily a water supply dam, due to its size Googong Reservoir can help reduce floods originating in the catchment.

Other flood mitigation works have been undertaken on the Molonglo River tributaries, including Sullivans, Yarralumla, Weston, and Jerrabomberra creeks. These are described in the information sheets for those catchments.

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.
- 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.
- 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.



GOOGONG-DAM-SPILLWAY