

FLOOD INFORMATION FOR GINNINDERRA CREEK

OVERVIEW

Ginninderra 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.

The Ginninderra Creek catchment is in north-west Canberra. Over 35% of ACT residents live in the catchment, making it the most urbanised catchment in the ACT. Ginninderra Creek rises in the upper reaches of Gungahlin and enters the Murrumbidgee at Ginninderra Gorge, below the falls. Ginninderra Creek mostly follows its natural channel, with some short sections converted to concrete stormwater drains.

The catchment covers approximately 320 square kilometres and spans approximately 18 kilometres north-south and 18 kilometres east-west. It has urban and rural residential land uses, broadacre farming and nature reserves. Urban development in the catchment, which has occurred rapidly since preliminary development began in the mid-1960s, includes the new suburbs being developed in West Belconnen, downstream from Belconnen Town Centre.

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



GIRALANG AND LAKE GINNINDERRA POND IN FLOOD

FLOOD INFORMATION

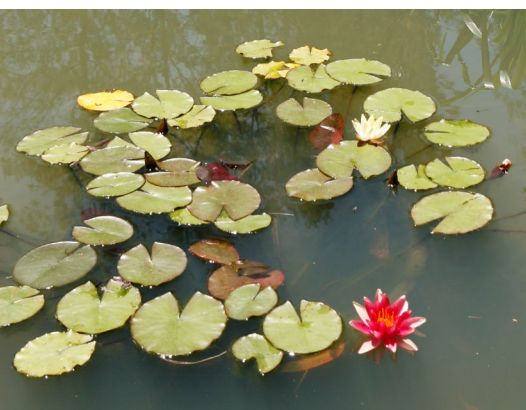
Every catchment has its own character, which determines how water flows. This is critical during storms that may lead to flooding. The ACT Government has re-assessed predicted flood paths and flood levels for catchments in the ACT using flood studies based on current industry standards.

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.



GINNINDERRA CREEK



FLOOD HISTORY

The Ginninderra Creek catchment has not experienced a 1% AEP flood since records have been kept. Minor flood events over the last ten years occurred in 2005, 2007 and 2012. A combination of catchment topography and a large catchment and water storages (dams) means that flood waters can generally be contained and most of the creek is not prone to significant flooding .

The Yerrabi, Gungahlin and Ginninderra ponds within the catchment need long periods of rain before overflowing and flooding. This creates sufficient warning time, often more than eight 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 path, depth and hazard potential of a 1% AEP flood event. During a 1% AEP flood, water levels in the Ginninderra Creek channels and floodways may be deep in some places and characterised by fast flows, creating hazardous conditions.

The maps show that the channel and floodway will generally cope with a 1% AEP flood except for some specific locations. There is the potential for low level flooding (less than 0.5 metre) in sections of Latham and MacGregor and higher levels (greater than 0.5 metre) in some areas of McKellar .

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

MITIGATION WORKS

Ginninderra Creek was planned differently to Sullivan's, Yarralumla and Tuggeranong creeks. The main watercourse was left in a largely natural state, green space was provided around the watercourses, and ponds were built for water quality and flow retardation. The three ponds (Yerrabi, Gungahlin and Ginninderra) were constructed on Ginninderra Creek to capture and treat run-off from urban development in the catchment. During heavy rain, these ponds are critical in reducing the peak water flows caused by urbanisation; run-off is higher in urban areas where rain runs off all the impervious surfaces such as roads and roofs.

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

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

As a result of developing the above mentioned 1% AEP maps the ACT Government has identified the key flood risk areas that require further investigation. Work has begun in these areas to refine the existing models and check whether buildings will be impacted in potentially affected areas. Options for built infrastructure to help prevent and contain floods are also being investigated; impacted stakeholders will be advised of the outcome of these studies as they become available.

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.

LAKE GINNINDERRA WETLAND

