

FLOOD INFORMATION FOR **TUGGERANONG CREEK**

OVERVIEW

Tuggeranong 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.

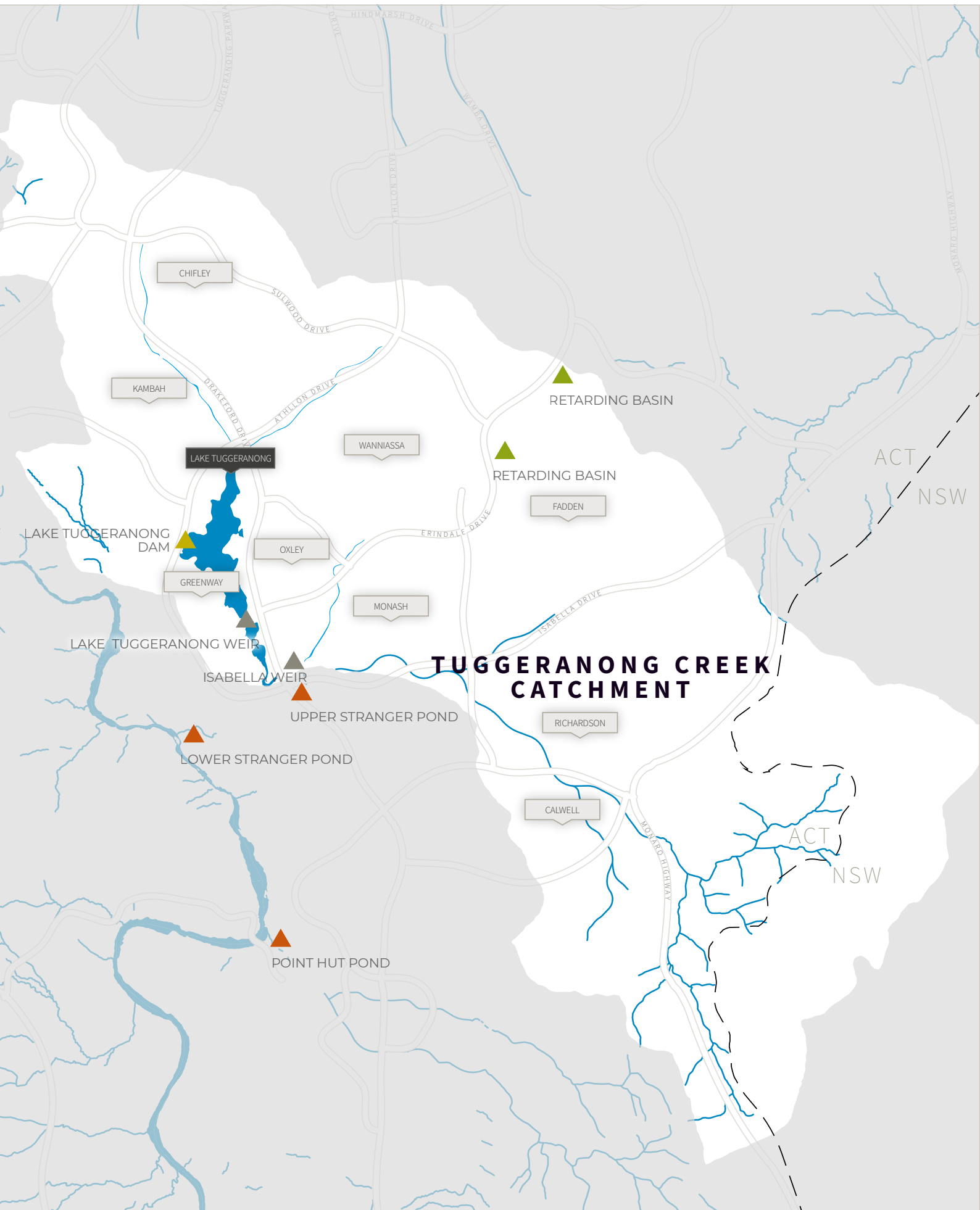
The Tuggeranong Creek catchment is the most southern of Canberra's catchments, extending from the Monaro Highway, south-east of Theodore, to the Lake Tuggeranong outlet at Athllon Drive. The catchment covers approximately 69 square kilometres and spans approximately 5 kilometres north-south and 13 kilometres east-west.

The catchment is highly urbanised (currently 72%), with some forested areas on the eastern fringes. Residential development began in the early 1970s. Ongoing development, including infill and redevelopment, continues.

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



ISABELLA WEIR, GROSS POLLUTANT TRAP



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.



MURRUMBIDGEE RIVER FLOWING INTO LAKE TUGGERANONG

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. 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 Tuggeranong Creek catchment is not prone to frequent and extensive flooding. It has experienced minor flooding, including in 2014, caused by heavy rainfall centred around Mount Taylor.

In the Tuggeranong Creek system, flooding is characterised by fast flowing flood water in and around the extensive creek channel network and culverts.

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. They show that the channels, culverts and bridges in the Tuggeranong Creek catchment will generally contain a 1% AEP event, with water flowing at high speeds making it hazardous in places. If flooding does occur outside the channels, flood depths are generally expected to be shallow.

For the 1% AEP flood event, there is the potential of extensive low level flooding in the Isabella Plains and in some sections of Kambah, Wanniasa, Greenway and Monash.

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



MITIGATION WORKS

Tuggeranong Weir was built in the early 1970s and Lake Tuggeranong, Isabella Weir and Upper Stranger Pond in 1988. They were primarily built to protect the water quality downstream in the Murrumbidgee River and Murray–Darling River Basin.

Due to the urban nature of the catchment, the Tuggeranong Creek system is crossed by major arterial roads. The embankments at these crossings create artificial flood storages, which during a flood would provide some help in managing the peak flows to areas lower in the catchment. However, this also means that the areas above these embankments would be at increased risk of flooding during a major flood event.

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.

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.