

# FREQUENTLY ASKED QUESTIONS

## FLOOD MAPPING

### *What is a 1 in 100 year storm?*

Geoscience Australia, a Federal Government agency, uses complex statistical analysis of Bureau of Meteorology rainfall data, to determine the probability of a storm of a particular size (in duration and in rain intensity) occurring at specific locations. A 1 in 100 year storm is a storm that has a 1% probability of occurring per year at a particular location, based on historical data. Various storm events rank as 1 in 100 year storms, with different rainfall intensities. For example, such a storm could last just 15 minutes with rainfall of 154mm/hour, it could last for one hour with rainfall of 102mm/hour, or it could be a 24 hour storm system with rainfall of 25mm/hour.

### *How do you know how much rain runs off the ground during a storm?*

Council's flood maps use the 30 year SA state planning information to determine how much land is covered with housing or pavement as against open space. This is then used to determine how much stormwater will run off an area in a storm event. The state plan expects there to be significant increases in density of housing in the greater Salisbury area and therefore a significant increase in stormwater runoff.

### *How is a flood map created?*

The map includes all storms within a particular probability then takes an estimate of the runoff from the ground to work out the flow - and therefore depth of flow - on roads and land across the City of Salisbury. It does not take into account the level of properties in the city.

### *What does the flood map represent?*

Flood maps are a planning tool. They represent the worst case scenario for depth of water across Council's digital terrain model (not including properties) according to a given probability of different storm events, assuming that the population and land use has increased in line with the state's 30 year plan and Council has not built any flood mitigation works after production of the flood map.

### ***Who made the flood maps?***

Council commissioned a private engineering consultant to produce the maps.

### ***If the flood map shows my property gets flood water through it, will this always be the case?***

It is important to understand that the flood map is based on a snapshot in time, based on the future land use planning over the next 30 years. Council has set aside over \$8 million in budget to complete flood mitigation works over the next four years, and \$5 million for further floor mitigation works over the following six years. Some of these works have already been completed since the flood map was produced. Council has committed to upgrading its stormwater systems where possible, in order to prevent flooding in homes and businesses, up to a 1 in 100 year flood event, over the next ten years.

### ***Why release the flood maps now?***

Council had to wait on confirmation of flood data from neighbouring councils and for new storm data from Geoscience Australia, in order to provide the most up-to-date and complete flood mapping possible.

### ***Why does the City of Salisbury want residents and business owners to ring Council or come in to review flood map information with Council staff, rather than providing it online?***

To give residents and business owners the best information possible to plan for their properties into the future, as Council staff have been educated on and understand the complexity of the current stormwater networks and the timing of future works.