

Painkalac Creek Flood Mitigation and Adaptation Study

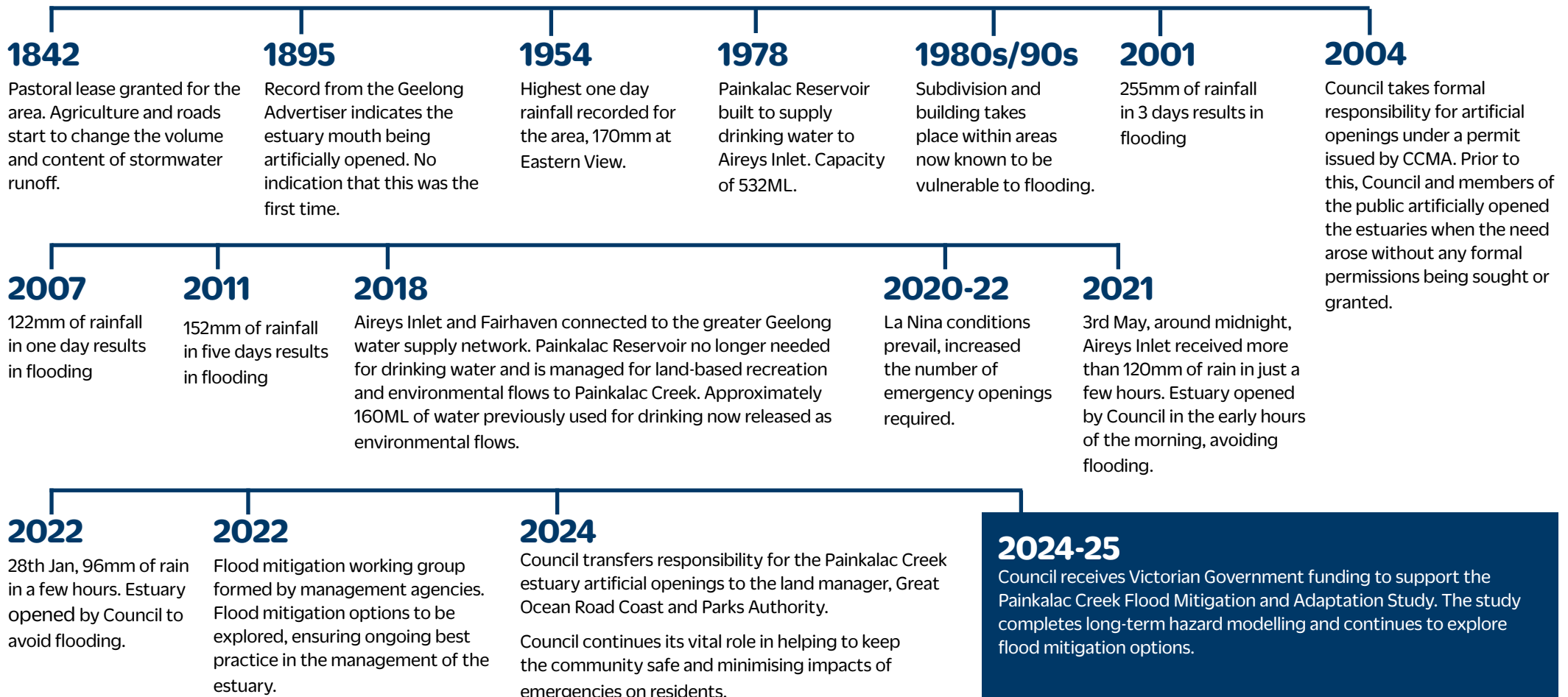


A Painkalac Creek study has provided a greater understanding of flood risk in Aireys Inlet and will help Surf Coast Shire Council and other agencies to manage flooding and support the coastal community.

The study has found that the changing climate – with more unpredictable storms and rainfall – will increase flooding risk to residential properties, businesses and critical infrastructure near the Painkalac Creek.

Council has historically understood that around 50 private properties near the creek are at risk of inundation from flooding without intervention. Long-term hazard modelling shows that a larger area could be subject to future flooding, potentially impacting an additional 54 properties by the year 2100.

The story so far



*This timeline is a work in progress with regards to flood events, and other important factors that impact flooding.

New flooding insights

Three reports have helped us understand the long-term hazards and flood mitigation for the Painkalac Creek estuary:

1. **Erosion hazard report:** forecasts that the river mouth, which is currently predominantly closed due to sand, will rise with sea level rise.
2. **Catchment hydrology report:** used existing rainfall data to create a prediction modelling system.
3. **Coastal inundation hazard assessment report:** considered different scenarios with different flood impacts, including an open sand berm versus a closed sand berm, and flooding caused by storm surge flooding versus riverine flooding.

The erosion hazard and catchment hydrology reports fed into the coastal inundation hazard assessment report, which told us that two scenarios with a closed berm would have the largest impact on flooding and the community.

The three reports are available in full at surfcoast.vic.gov.au/Painkalac.

Did you know?

All Victorian councils have a responsibility to promote “the economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks” under the *Local Government Act 2020*.

It's why we've undertaken this flood risk study. It has provided us with new information that helps both Council and the community to plan and will guide future decision-making.

We're committed to sharing modelling information with residents and involving them along the way, before any decisions are made in the years ahead.



Frequently Asked Questions

My property has been added to the impacted area. What should I do?

We acknowledge the flood modelling may be difficult to take in for the Aireys community, particularly for property owners added to the impacted area.

Community awareness is important, so that people – both locals and visitors, both current and future residents – understand future flood risk.

We urge people to stay updated with information, ask questions, and to attend any community sessions.

What has caused this increased flooding risk?

In recent years we've experienced more unpredictable storm events and rainfall. Some of this has been due to La Nina weather patterns.

This has increased flooding risk to residential properties, businesses and critical infrastructure near the Painkalac Creek. The modelling tells us this will worsen as climate change impacts continue to emerge.

One-in-100-year severe weather events are now occurring more regularly, at an estimated seven times every 100 years.

Given the Painkalac catchment is relatively short, intense rainfall has a significant impact on the flood risk. A higher sand berm at the mouth increases the impact to properties before an opening – either artificial or natural – can occur.

Can't authorities keep artificially opening the estuary to reduce flooding risk?

Artificial opening is our current flood risk mitigation to protect houses and people. It has environmental impacts and could possibly become less effective over time.

We need to investigate other solutions. Phase two of this study will seek to consider some of these options.

The development of an adaptation plan will establish how we move forward with other solutions as climate impacts increase. This will take some time to develop. We will consult with the community following the study.

What's next?

We will continue to keep impacted residents and the wider community informed about the flood study as it progresses.

Phase two will consider options on how to reduce the flood risk and potential solutions.

We'll release more information on phase two in the first half of 2026.

Painkalac Creek monitoring will continue and artificial openings will occur when appropriate.