

2. Wallington Road Culvert Upgrade

WHAT IS THE PROJECT?

This project involves an upgrade to the culvert under Wallington Road, downstream/west of Blue Lake.

A culvert is a drainage structure that allows stormwater to pass under a road. The existing culvert is a key outlet for water flowing from Blue Lake and from the northern catchment into Pacey's Park.

During heavy rainfall, the culvert can limit how quickly stormwater moves through the system. This can cause water to back up upstream of Wallington Road and contribute to localised flooding.

This option would involve increasing the capacity of the culvert to help stormwater move through the area more effectively during significant rainfall events.

HOW WOULD THIS HELP?

- > The study suggests this option could reduce flood risk for approximately 8 properties during an intense rain event (1 per cent AEP).

FURTHER INFORMATION:

- > This option is considered to be relatively straightforward to construct compared with some other mitigation options being investigated.
- > Because this option may allow more stormwater to move downstream during heavy rainfall, a careful impact assessment would be required to understand any potential effects on the downstream drainage channel and surrounding environment.



Figure 4: Wallington Road Culvert Upgrade.

WHAT DOES FLOOD RISK LOOK LIKE IF THIS PROJECT IS BUILT?

The diagrams below show the modelled change in flooding if this option was delivered.

Green = Decreased flooding Pink = No longer occur for the event shown.
Different shades of green show different levels of flood reduction. In some areas, even a small reduction in flood depth may help reduce the potential impact of flooding during a major storm event.

Modelled flooding risk after project built (20 per cent AEP)



Figure 5: 20 per cent annual exceedance probability (AEP) modelling results.

Modelled flooding risk after project built (1 per cent AEP)



Figure 6: 1 per cent annual exceedance probability (AEP) modelling results.

INDICATIVE PROJECT COST

Medium – more than \$1 million

IMPLEMENTATION TIME

Short-term – within 2 years

CAN THIS OPTION BE STAGED

No - the full project would need to be completed at one-time.