

Queensland Betterment Programs

Queensland leads the nation in building resilience in its communities through betterment programs.

Queensland's experience with betterment funds shows that an upfront investment in rebuilding impacted assets to be more resilient saves money for all levels of government in future disasters.

Since the first betterment fund was established in 2013, more than 531 projects across 70 local government areas in Queensland – with a betterment value of more than \$434 million – have been approved, helping create stronger, more resilient Queensland communities.

Of the 531 betterment projects completed to date, 423 projects have been subsequently impacted a total of 1173 times across 44 events

79 per cent of those impacted suffered no damage, or only minor superficial damage

From a \$174 million investment, there is \$397.5 million in avoided reconstruction costs*



Image: Scenic Highway, Livingstone Shire Council.



Image: Little Bynoe Crossing, Carpentaria Shire Council.

What is betterment?

Betterment allows local governments and state agencies to rebuild essential public assets to a more resilient standard to help them withstand the impacts of future natural disasters.

Examples include improvements to vital infrastructure such as roads, bridges and floodways. These can vary from stabilisation of low-lying roads to reduce erosion and scouring, upgrades to drainage structures to increase capacity or replacing gravel with reinforced concrete to improve resilience.

The first betterment fund was established by the Queensland Reconstruction Authority in 2013 following Severe Tropical Cyclone Oswald. The \$80 million program delivered 232 projects across 35 local government areas.

The second betterment fund was created in 2015 following Severe Tropical Cyclone Marcia. The \$20 million program saw 63 projects delivered across eight local government areas.

In 2017, following Severe Tropical Cyclone Debbie, the third betterment program was set up. The \$41.85 million program delivered 83 projects across 22 local government areas.

The fourth betterment program was established in 2019 after the North and Far North Queensland Monsoon Trough. The \$102 million program saw 107 projects approved for delivery across 35 local government areas. It was also the first time that state-owned assets were eligible for betterment funding, meaning assistance was available to improve the resilience of state roads.

In 2021, a \$20 million betterment program was made available, which was the first program to be delivered in Australia under the new DRFA Efficiencies Framework. It was available in 47 local government areas that were hit by the nine eligible disaster events from the 2020-21 season. A total of 39 projects across 21 councils were approved.

*Avoided costs are estimates only, based on data provided by councils on impacts or likely impacts, and calculated on eligible reconstruction costs under Category B of the DRFA/NDRRA at the time of project approval.

Information is current as at July 2023.

Working together to improve resilience

Betterment is a great example of all levels of government working together to improve the resilience of Queensland communities.

Through the various betterment programs, local governments have been empowered to assess, plan and implement disaster resilience at a grass-roots level, enabling work to begin as soon as possible following a natural disaster, helping to mitigate the impact on their local communities.

Queensland's betterment programs have been jointly funded by the Commonwealth and Queensland governments under Category D of the Disaster Recovery Funding Arrangements (DRFA) and prior to November 2018, the Natural Disaster Relief and Recovery Arrangements (NDRRA).

Reducing the cost of natural disasters

A key test for betterment projects is whether they leave infrastructure and communities less vulnerable to the impacts of natural disasters.

As at July 2023, 423 projects have been subsequently impacted by natural disasters. In total, there have been 1173 impacts to betterment sites from 44 events, with 79 per cent suffering no damage or only minor or superficial damage.

In some cases, assets have been subsequently impacted multiple times, including, for example, Aurukun Access Road, which has been hit 10 times.

Of the betterment projects that have been re-impacted, an investment of \$174 million has generated approximately more than \$397.5 million* in savings or avoided costs, which is a great outcome for all levels of government, as well as Australian taxpayers.

It is worth noting that some of the re-impacted projects completed since 2017 or 2019 have already highlighted the benefits of betterment. Given the number of natural disasters that impact Queensland each year, the avoided costs are expected to continue to increase.

Other benefits

Not only has betterment achieved substantial cost savings through more resilient infrastructure, it has also improved the lives of those living in impacted communities. Roads, bridges and other infrastructure are able to withstand weather events, and return to functionality much sooner in the immediate aftermath of a disaster. Further, the avoided costs figure is based on estimated reconstruction costs only and does not include the many intangible benefits associated with having more resilient infrastructure. This can include social, economic, and environmental benefits such as more connected communities, continuity of telecommunications, road networks and other essential services, increased consumer confidence and business activity, and reduced impacts on the environment (for example, erosion and run off into creek beds and other waterways). If these intangible benefits were included the total avoided cost figure would be much higher.

2021–22 Betterment Fund

A total of \$170 million Betterment Fund has been established to rebuild essential public infrastructure damaged in the 2021–22 disaster season to a more resilient standard.

It is the largest program made available in a single disaster season in Queensland with \$150 million directly targeting 37 local government areas following the extraordinary flooding events of 2021–22.

A further \$20 million through DRFA efficiencies is available in all 66 local government areas activated for disaster funding following the nine disasters that impacted Queensland during the 2021–22 disaster season.

Council and state agencies are able to apply for the \$170 million betterment funding, more information is available at www.qra.qld.gov.au/betterment/2021-22-betterment-fund.

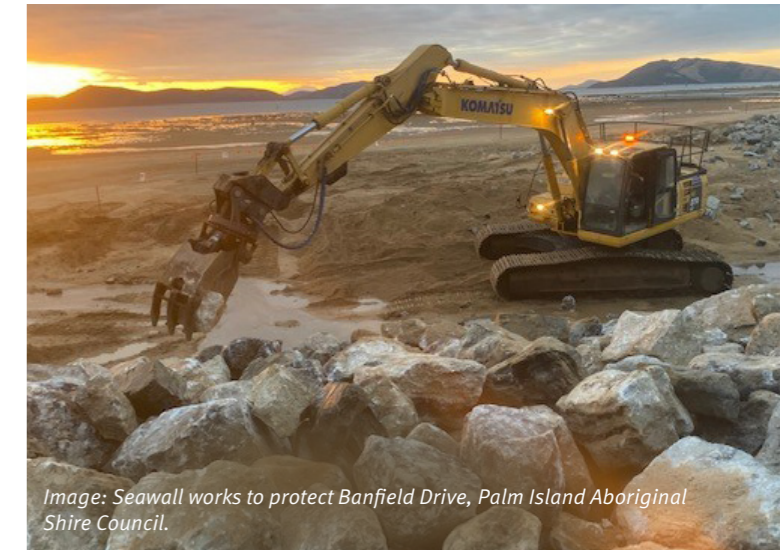


Image: Seawall works to protect Banfield Drive, Palm Island Aboriginal Shire Council.



Image: Shute Harbour works in progress, Whitsunday Regional Council.

Betterment in action

Gayndah Mundubbera Road North Burnett Regional Council

- Gayndah Mundubbera Road is an essential freight and transport link for the North Burnett region, connecting the highly productive agricultural towns of Gayndah and Mundubbera.
- The road was damaged in 2011 and rebuilt only to be re-damaged in 2013.
- Betterment funding from 2013 was used to increase the resilience of the two-kilometre section of road adjacent to the Burnett River that was washed out, relocating it 11 metres uphill.
- New stormwater drainage works (including concrete-lined channels, culverts and scour protection) were also completed, improving functionality of the entire Gayndah-Mundubbera Road.
- The road has since been impacted by eight natural disaster events (one in 2015, two in 2017, three in 2022 and one in 2023) and has remained functional with only minor expenditure required to clean up and remove debris.



Before



After

- 🏠 Restoration: \$6,785,707
- 🏠 Betterment: \$1,308,863
- 💰 Avoided cost over eight events: \$54,285,656

Villis Bridge Scenic Rim Regional Council

- Villis Bridge is located on Niebling Road and is the only access road for approximately 12 properties.
- High velocity flooding in the 2013 Severe Tropical Cyclone Oswald event tore the bridge from its foundation and washed it downstream.
- Niebling Road was closed for up to three weeks following the event and an alternative route through private property was established to provide access to residents, primary producers and freighting services.
- The betterment project constructed a new, safer concrete Villis Bridge, as well as stream bank protection for 30 metres either side of the bridge increasing its resilience.
- It has since been impacted by seven natural disaster events (one in 2017, two in 2020, one in 2021 and three in 2022) and has remained undamaged and functional throughout.



Before



After

- 🏠 Restoration: \$1,597,077
- 🏠 Betterment: \$232,845
- 💰 Avoided cost over seven events: \$11,179,537

Aurukun Access Road Aurukun Shire Council

- Aurukun Access Road was a gravel road that provides the only road link to and from the Aurukun community.
- The road was damaged in 2010, 2011, 2012 and 2013.
- Betterment funding from 2013 was used to bitumen-seal a 10-kilometre section of the road that was particularly vulnerable to flood damage.
- It has since withstood the impacts of 11 separate natural disaster events, making it the most frequently impacted completed betterment project to date, remaining functional with only very minor damage.
- In addition, \$1.2 million of betterment funding from 2019 was used to infill scoured sections of the road and stabilise the shoulders and embankments and was subsequently impacted by two events in 2022.



Before



After

- 🏠 Restoration (two projects): \$979,366
- 🏠 Betterment (two projects): \$2,299,695
- 💰 Avoided cost over 11 events: \$9,323,219

Various projects Somerset Regional Council

- Somerset Regional Council has a large number of major and minor waterways crossing through the region which leave it vulnerable to damage.
- Floods in 2011, 2013 and 2015 caused extensive damage to roads and bridges across the region.
- Since the first betterment program was established in 2013, council has been approved for a total of 42 betterment projects.
- A range of upgrades have been made to essential public assets such as culverts, roads, bridges and floodways to better withstand the impacts of natural disasters.
- Council has been subsequently hit by multiple events, including the 2021–22 events, and the upgraded assets have all remained functional, which has allowed the important road and transport network to re-open once waters recede following events.



Before



After

- 🏠 Restoration: \$6,855,797
- 🏠 Betterment: \$8,434,091
- 💰 Avoided cost over three events: \$13,670,997