Holmview station precinct

Information on the hydrology assessment undertaken to inform final precinct design.

Key benefits for the community

- Improved safety through level crossing closures and local road improvements
- Better connections with improved walking and cycling infrastructure
- Support greater reliability of future rail services

ActivUs has prepared a detailed hydrology assessment on the movement and distribution of water within the Logan and Gold Coast Faster Rail (LGC) project area and surrounding community.

Information from hydrology assessments has informed the final design of the rail alignment, local road configuration and station precinct at Holmview and ensures the new station and associated infrastructure does not worsen flood impacts on landowners and the wider community.

As part of the Holmview station precinct upgrades there will be an improved drainage network to enhance the overall resilience of the rail corridor and precinct during heavy rainfall events.



Our approach

The LGC project hydrology assessment incorporated:

- guidelines and requirements for government-supported transport infrastructure
- Logan City Council flood modelling data.

A specific hydrology model was developed that assessed water levels, depth and velocities for a range of potential events, at different Annual Exceedance Probability (AEP) scenarios. AEP describes the percentage likelihood of a flood of a certain size occurring in a given year, with a lower percentage indicating a larger flood event.

The hydrology model factored in a range of different scenarios including, but not limited to:

- different tidal events
- rainfall scenarios (local vs regional)
- storm surges
- runoff rates from the surrounding areas
- potential blockage events
- projected climate change horizon to 2090.





Design outcomes

As a result of the LGC project hydrology assessment, the design at Holmview incorporates:

- an improved drainage network along the rail corridor to support additional tracks and overall resilience to heavy rainfall events
- installation of new and upgraded culverts and cross-drainage structures to safely convey floodwaters beneath the rail line and reduce flood impacts
- erosion and scour protection measures to improve the durability of drainage assets during high-flow events.

In all flood events modelled, the LGC project hydrology assessment confirmed there will be:

- no adverse or unacceptable changes in peak flood levels around the project site during construction or after the station and associated infrastructure is built
- no additional flooding impacts on existing infrastructure.

If you have questions or would like further information about hydrology and station design, please contact our project team.

Stay up to date

Search on tmr.qld.gov.au:
'Logan Gold Coast Faster Rail'

Email: lgcrail@activusalliance.com.au

Call: 1800 957 066 (all hours)

For information in **Gagana Sāmoa**, **ਪੰਜਾਬੀ**, **简体中文**, **عربي** and **தமிழ்** or other support services, please contact the project team on **1800 957 066** (9am – 5pm Monday to Friday)

For more information, **scan the QR code.**

www.yoursay-projects.tmr.qld.gov.au/logan-and-gold-coast-faster-rail

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