



Assessment of alternative alignments for the Coomera Connector near Eagleby

The Coomera Connector will relieve congestion on the M1

The Coomera Connector is being planned as a key new north south road between Logan and the Gold Coast that will relieve congestion on the Pacific Motorway (M1). Population growth in the northern Gold Coast area and Logan is contributing to growing congestion on the M1 and the need for a new road between Loganholme and Nerang that will provide additional crossings of the Logan, Albert, Coomera and Nerang rivers is widely recognised.

Stage 1: Coomera to Nerang

The Australian and Queensland governments have committed \$1.53 billion to build the priority stage of the Coomera Connector between Coomera and Nerang.

Construction of Stage 1 is expected to commence from mid-2021, following government consideration of the Stage 1 business case and obtaining environmental approvals.

Construction of Stage 1 is expected to be completed by the end of 2025, with some sections expected to be progressively open to traffic from late 2024.

The alignment between Loganholme and Stapylton

After undertaking planning to identify the preferred alignment and consulting with affected landowners, the Department of Transport and Main Roads (TMR) formally recognised the alignment of the final section of the Coomera Connector between Loganholme and Stapylton in the *Queensland Government Gazette* on 15 March 2019.

While four out of five people surveyed in November 2019 supported the Coomera Connector being built as soon as possible*, some community members had questions about the alignment of the Coomera Connector near Eagleby and potential impacts on the Eagleby Wetlands.



Australian Government

BUILDING OUR FUTURE



Queensland Government

Open for comment

The outcomes of the assessment of alternative alignments for the Coomera Connector near Eagleby is open for comment until 30 June 2021.

Do you have ideas about how recreation facilities around the Eagleby Wetlands could be improved as part of the Coomera Connector project?

If so, we would like to hear about them.

Provide feedback online

Visit: www.tmr.qld.gov.au/coomeraconnector

Talk to us in person

The project team will be holding community drop-in sessions to enable you to ask questions and provide face-to-face feedback.

Visit the website to find out drop-in session locations and times.

Visit: www.tmr.qld.gov.au/coomeraconnector



Coomera Connector timeline

Construction of Coomera Connector Stage 1 (Coomera to Nerang) is expected to commence from mid-2021 and be completed by the end of 2025.

A business case for the next priority stage is expected to be completed by the end of 2023.

Noise mitigation

Future assessments of baseline, construction and operational noise will occur in accordance with the Department of Transport and Main Roads Transport Noise Management Code of Practice to inform inclusion of best practice noise mitigation measures within the design.

Opportunities to improve recreation facilities

Opportunities to consider improvements to recreation facilities around the Eagleby Wetlands including enhancements to pedestrian and cycle networks and boardwalks, and picnic and rest areas will be considered through future planning and design development.

In addition to improving recreation opportunities for the local community, improvements in recreation facilities could facilitate eco-tourism opportunities around the wetlands.

Future consultation

When future planning, design development and environmental approvals are progressed for the Coomera Connector in the vicinity of Eagleby, additional consultation will be undertaken with the community, including traditional owners.

Strong track record of best practice environmental management

TMR has a strong track record of minimising impacts of construction on the environment and is committed to achieving positive environmental outcomes.

More recently for the Gateway Upgrade North project, a range of measures were put in place to protect and preserve the natural environment, including sensitive areas at the Nudgee Waterhole and Boondall Wetlands.



Road construction near the Nudgee Waterhole

Contact us

If you would like further information about the Coomera Connector, please contact the project team to register for updates.

Ph: 07 5563 6600
8.30am — 4.30pm, Monday—Friday

Email: coomeraconnector@tmr.qld.gov.au
Website: www.tmr.qld.gov.au/coomeraconnector



RECYCLED CONTENT

13 QGOV (13 74 68)
www.tmr.qld.gov.au | www.qld.gov.au

Managing impacts around Eagleby

TMR is aware of the sensitivities of future construction activities for the Coomera Connector in the vicinity of the Eagleby Wetlands.

TMR recognises the importance of the Eagleby Wetlands to the local community and the environment and is committed to environmentally sensitive design and construction practices and procedures to minimise environmental impacts.

The timing for progressing future planning, design development and environmental approvals for the Coomera Connector in the vicinity of Eagleby is not yet confirmed.



The Coomera Connector will be designed and constructed in an environmentally sensitive way to minimise impacts on the Eagleby Wetlands.

Protecting flora and fauna

A variety of birds and other wildlife are known to visit or inhabit the Eagleby Wetlands area.

Protecting and enhancing the wetlands at Eagleby is important and achievable through further planning and design of the Coomera Connector.

Limiting impacts during constructions and operations, including maintaining good water quality during construction will be a key objective of the Coomera Connector to ensure the sustainability of the flora and fauna at Eagleby.

Future planning and design development will aim to avoid or minimise disturbance to the wetlands by:

- undertaking additional flora and fauna surveys and a detailed assessment of potential impacts on the wetlands
- locating bridge abutments outside of wetland areas
- incorporating best practice fauna movement structures in the design
- including water quality measures in the design such as vegetated swales, spill containment and water quality basins
- maintaining water quality by implementing a comprehensive water and soil management plan.

Designing to avoid flooding

Preliminary hydraulic modelling informed the location of the gazetted corridor. The gazetted Coomera Connector alignment optimises the length of bridge structures and the location of crossings of major rivers, avoiding sensitive areas.

Bridges and culverts will be used within floodplains to minimise changes to existing flood patterns including flood height, duration, flows, directions and velocities.

The design criteria for the Coomera Connector will ensure no existing dwellings are adversely affected by flood events up to the 1 in 100-year average recurrence interval flood event.

Managing fire ants

Fire ants are an existing biosecurity threat in South East Queensland, including in the Eagleby area.

Biosecurity Queensland is currently delivering the National Red Imported Fire Ant Eradication Program; a progressive 10-year rolling strategy in South East Queensland on behalf of the Australian Government.

Prior to starting construction, TMR will consider potential implications and biosecurity obligations relating to fire ants and identify specific management measures to prevent the spread of fire ants. Strategies may include:

- fire ant education and training programs for construction contractors
- protocols for the wash down of construction equipment
- using materials that are certified to be free of fire ants
- implementing inspection and reporting protocols and procedures.

Managing acid sulfate soils

Acid sulfate soils are naturally occurring soils containing sulfide minerals characteristic of low-lying coastal environments in Queensland, including in the vicinity of Eagleby.

Design and construction of roads in Queensland is subject to strict guidelines to ensure measures are in place to minimise disturbance of acid sulfate soils. Where acid sulfate soils are disturbed, guidelines must also be followed to mitigate the effects and ensure the safe handling.

A detailed assessment of acid sulfate soil risks will be undertaken during future planning and design development, in accordance with the *Queensland Acid Sulfate Soils Technical Manual Soil Management Guidelines*.

Amendments to alternative routes

Reducing congestion on the M1 is a key objective of the Coomera Connector. For the Coomera Connector to meet this objective, transport modelling completed by TMR has identified the northern end of the new road needs to connect with the Logan and Pacific motorways.

To allow for a meaningful comparison of alignments with similar levels of functionality, the following amendments were made to the alternative alignments suggested by the community:

1) Alternative alignment 4 suggested by the community did not connect to the M1 and therefore did not meet the functionality requirements for the predicted future transport demand around the Logan River.

Alternative alignment 4 was amended to include the upgrading of Beenleigh-Redland Bay Road to at least six lanes between the Pacific Motorway and Mount Cotton Road, which would be required to meet 2041 travel demand forecasts.

2) Alternative alignment 6 would result in a bottleneck of traffic at Stapylton on the M1 and would not provide the required transport capacity improvements over the Albert and Logan rivers.

Alternative alignment 6 was amended to include upgrading of the M1 between Loganholme and Stapylton, which would also be required to meet 2041 travel demand forecasts.

Legend

- Existing Motorway
 - Gazetted Coomera Connector alignment
 - Koala Priority Area
 - Wetlands of state significance
 - Carbrook Wetlands Aggregation (nationally significant wetlands)
 - Carbrook Wetlands Conservation Park (Ramsar wetlands)
- Alternative alignments suggested by community**
- Alternative alignment 1
 - Alternative alignment 2
 - Alternative alignment 3
 - Alternative alignment 4
 - Amended for comparison
 - Alternative alignment 5a and 5b
 - Alternative alignment 6
 - Amended for comparison

Assessment outcomes

Functionality (ability to reduce congestion)

Reducing congestion and improving reliability of the M1 is a key objective of the Coomera Connector. Travel demand modelling found the gazetted Coomera Connector alignment (and alignments 5a and 5b) will reduce forecast daily vehicle numbers on the M1 at the Logan River by 45,000 vehicles, while the next best alternative (amended alignment 4) offers a reduction of 31,000 vehicles.

The gazetted Coomera Connector alignment (and alignments 5a and 5b) have the added benefit of reducing daily vehicle numbers on Beenleigh-Redland Bay Road by more than 16,000 vehicles (at California Creek). Beenleigh-Redland Bay Road would not need further upgrades on this basis. Alternative alignments 1-4 would require a significant upgrade of Beenleigh-Redland Bay Road to meet forecast travel demands.

Alternative alignment 6 would require significant upgrading of the M1 between Loganholme and Stapylton to meet future travel demand forecasts.

An additional benefit of the gazetted Coomera Connector alignment is that it provides the opportunity to greatly improve accessibility for the Eagleby community, providing another access to the M1, Logan Motorway and to the Redland shire.

Human environment

Property resumptions are a sensitive, but sometimes necessary part of building new transport infrastructure. In planning new roads and upgrades, TMR seeks to minimise property impacts where possible and approaches each case with the utmost compassion.

The assessment found the gazetted Coomera Connector alignment (and alignments 5a and 5b) will have the least impact on the human environment based on the number of impacted properties and residences.

Alternative alignment 6 which would involve adding lanes to the M1 between Loganholme and Stapylton would involve more than 1300 per cent more homes impacted than the gazetted Coomera Connector alignment.

A number of alternative alignments suggested by the community link to Beenleigh-Redland Bay Road. This would require Beenleigh-Redland Bay Road to be upgraded to at least six lanes, which is greater than what TMR future planning currently allows for. It would mean significantly higher volumes of traffic would use the road, impacting the communities of Loganholme, Carbrook and Cornubia, local businesses and three local schools off Beenleigh-Redland Bay Road.

Natural environment

All alignment options for the Coomera Connector fall within the catchments and floodplains of the Logan and Albert rivers that contain natural environmental values.

Concerns have previously been raised about potential impacts the gazetted Coomera Connector alignment could have on the Eagleby Wetlands. Independent experts have confirmed however, that while a variety of birds regularly visit the area, the Eagleby Wetlands are not currently recognised as wetlands of national or international significance.

Alternative alignments 1, 2 and 3 however, located to the east of the gazetted Coomera Connector alignment have a greater impact on the environment, traversing more environmentally sensitive areas, including Ramsar wetlands and a Koala Priority Area on the northern side of the Logan River.

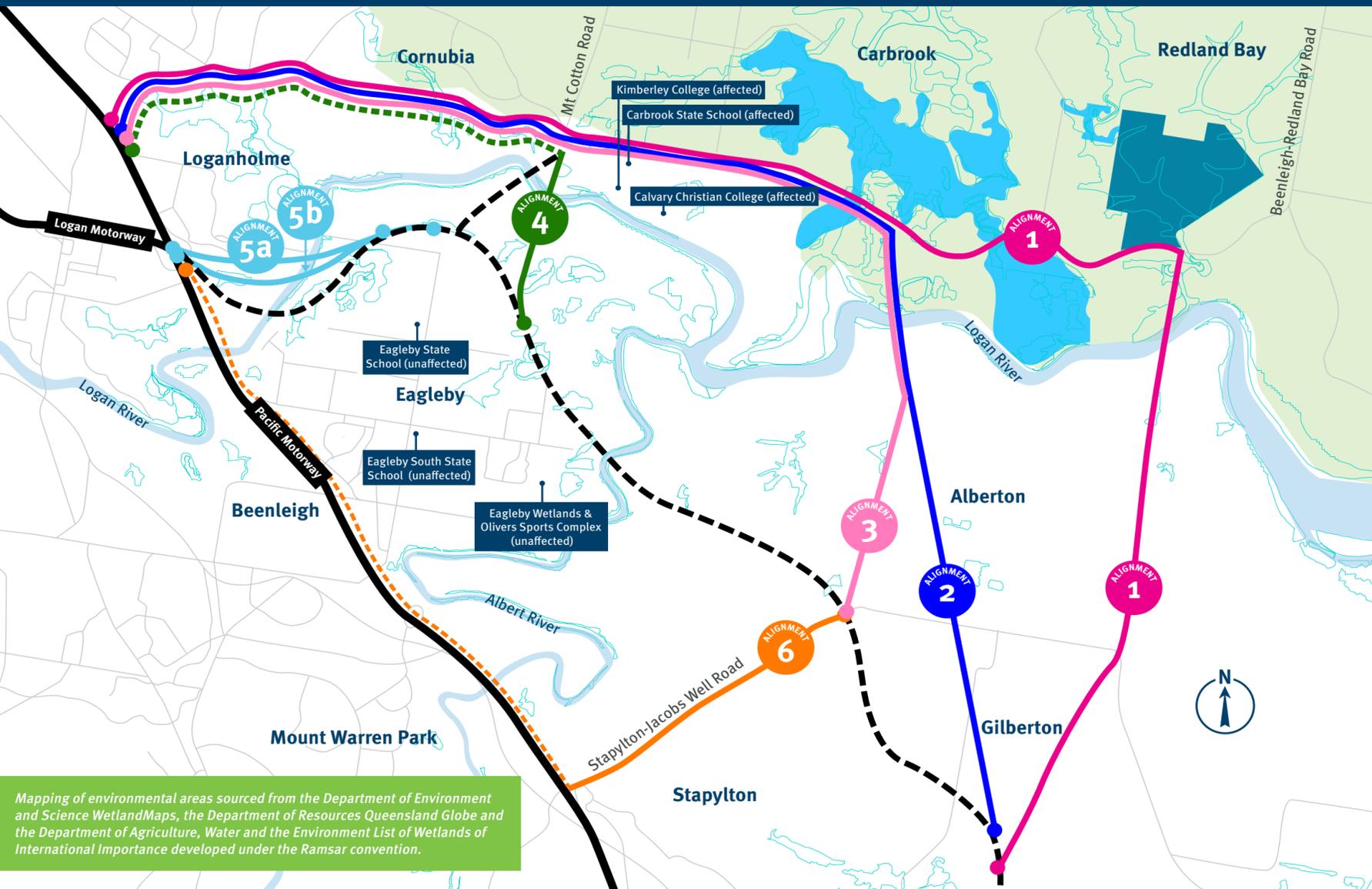
Alignment 6 has the least impact on the natural environment as it follows an already highly disturbed road corridor.

Cost

All alternative and amended alignments suggested by the community would cost more than the gazetted Coomera Connector alignment. Alternative alignments 1-4 would be 17-24 per cent higher in cost and alternative alignment 6 would be 217 per cent higher in cost. Higher costs for the alternative alignments is primarily caused by upgrade costs for Beenleigh-Redland Bay Road or the M1, and additional property resumptions.

While alternative alignments 5a and 5b would be shorter in length than the gazetted Coomera Connector alignment, they would cost more due to the increased length of bridging that would be required over the Logan River.

Six shortlisted alternative alignments suggested by the community were assessed in comparison to the gazetted Coomera Connector alignment:



	Gazetted Coomera Connector alignment	Alignment 1	Alignment 2	Alignment 3	Amended Alignment 4	Alignment 5a and 5b*	Amended Alignment 6
Functionality - Daily reduction in number of vehicles using M1 at Logan River	-45,000	-17,900	-26,300	-25,300	-31,000	-45,000	No reduction
Human environment - Number of properties directly impacted (Loganholme—Stapylton)	104	146	137	138	131	104	394
Number of homes directly impacted (Loganholme—Stapylton)	22	41	28	33	38	22	>300
Natural environment - Impacts on matters of state, national and international significance							
Wetlands of state significance		Wetlands of international and national significance and Koala Priority Area	Wetlands of international and national significance and Koala Priority Area	Wetlands of international and national significance and Koala Priority Area	Wetlands of state significance	Wetlands of state significance	Least impact as it follows existing road corridor
Cost - Increase or decrease in cost compared to gazetted Coomera Connector alignment							
Base case		+24%	+24%	+17%	+17%	+9-17%	+217%
Overall assessment rank							
	1	5	5	3	3	2	7

* Alignment 5a & 5b are minor deviations of the gazetted Coomera Connector corridor.

Summary of findings

Overall, the assessment determined the gazetted Coomera Connector alignment:

- provides the best overall outcome compared to the alternative alignments
- provides the greatest level of congestion relief at the Albert and Logan rivers
- impacts the least number of properties and homes between Loganholme and Stapylton
- impacts the environment to a level that can be mitigated through design and construction, but avoids matters of national and international environmental significance north of the Logan River
- provides the best value for money.

Alternative alignments 5a and 5b were the next best, followed by alignment 3 and amended alignment 4, alignments 1 and 2, and amended alignment 6.