



Carmichael Mine Project North Galilee Water Scheme





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The North Galilee Water Scheme (NGWS) is part of the water supply solution for the Carmichael Mine Project. It includes three components of infrastructure:

- 1. Floodwater harvesting** - intake pump station and infrastructure to transfer water from the Suttor River to the Belyando Junction Dam
- 2. Expansion of Belyando Junction dam** - to store floodwaters from the Suttor River
- 3. Water supply pipeline** - from the dam to the mine site, including pump stations.

The water transported by the pipeline will be pumped from the Suttor River only when it is in flood, flowing at a rate of more than 2,592ML per day, and farmers have taken what they need. Conditions further limit water uptake to 12.5GL a year, and we will pay for using this water in the same way and at the same cost as other users.

The NGWS is currently being assessed, however the assessment process will not delay construction works for the mine or when the mine starts operating.

The Carmichael Mine will use water for three purposes:



General use



Dust suppression

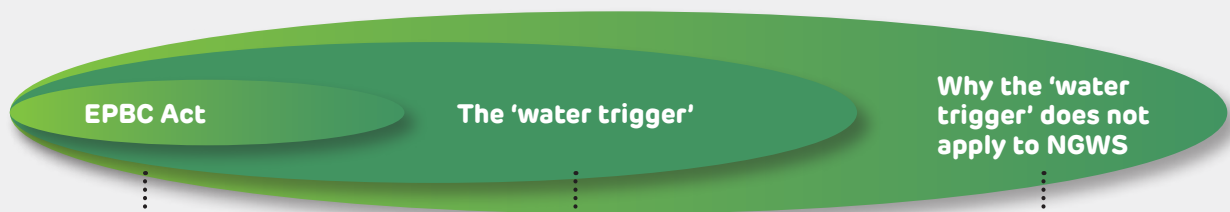


Washing coal

Pipeline details

Location	North-western boundary of the Brigalow Belt Bioregion, Queensland
Facility type	Fixed underground water supply pipeline
Full length	Approximately 110km
Operation	Pumps water from the Belyando Junction Dam to the mine site
Associated infrastructure	Access roads and tracks Flood harvesting pump station Laydown areas Pump stations Temporary construction camp 10GL dam

Why the 'water trigger' does not apply



The EPBC Act is the Federal Government's central piece of environmental legislation protecting Matters of National Environmental Significance.

Water resources are a Matter of National Environmental Significance in relation to coal seam gas (CSG) and large coal mining developments. Both require federal assessment (the 'water trigger') and approval if they are likely to have a significant impact on a water resource.

Large coal mining development relates to impacts on water resources that form part of the process to extract coal.

NGWS is not a CSG or large coal mining development. The NGWS is considered associated infrastructure and therefore does not require assessment under the 'water trigger'.

The 'water trigger' was applied to the Carmichael Mine and Rail Project through the Environmental Impact Statement process in 2014.

Read the definitions from the Federal Government's Department of the Environment and Energy website:

www.environment.gov.au/system/files/resources/d078caf3-3923-4416-a743-0988ac3f1ee1/files/sig-water-resources.pdf

Environmental assessment

Since 2015, we have completed numerous studies on the NGWS to determine final alignment and the application of environmental approvals.

These studies included an environmental impact assessment which considered Matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.



The approvals framework





Infrastructure component 1 - floodwater harvesting

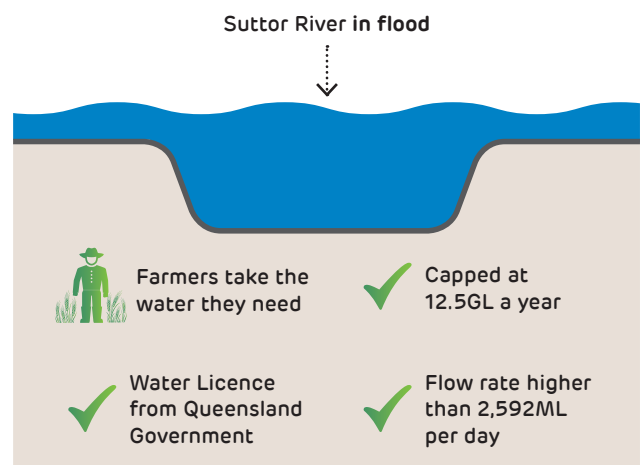
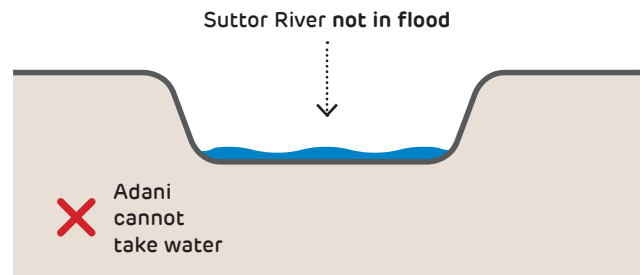
We received our water licence in 2017 from the Queensland Government which allows us to take up to 12.5GL of water per year.

Strict conditions are imposed under this water licence to protect water security and the rights of other water users in the area. We can only pump floodwater from the Suttor River when:

1. It is in flood
2. Farmers have taken what they need
3. The flow rate in the Suttor River is higher than 2,592ML per day.

The Queensland Government has capped floodwater harvesting at 12.5GL a year which is less than 1% of the annual flow of the Suttor River. In times of drought, we cannot take any water from the area.

We will also pay for water in the same way and at similar costs to other users.



Infrastructure component 2 - expansion of Belyando Junction Dam

The floodwaters harvested from the Suttor River will be stored in the existing Belyando Junction Dam, to be expanded to a capacity of 10GL.

Existing tracks will be used, minimising environmental impacts during construction and operation.

Key Facts

- Landholder agreements are in place with those who are directly impacted
- No State Government protected remnant vegetation will be impacted.

Infrastructure component 3 - water supply pipeline

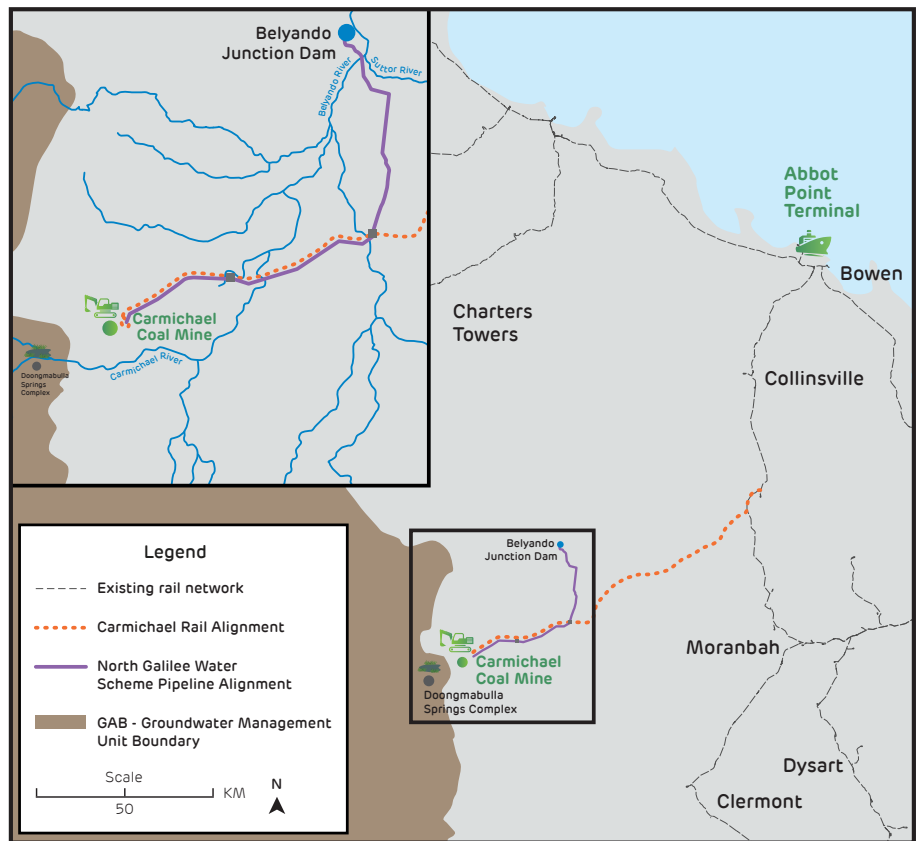
Alignment

The NGWS pipeline is approximately 110km long. It will connect the Belyando Junction Dam to the mine site, and in sections runs parallel to the Carmichael Rail alignment (refer to map).

The alignment was chosen to:

- Maximise use of existing cleared areas and tracks
- Avoid floodplain tributaries
- Avoid environmentally sensitive areas
- Minimise the number of private properties crossed.

The final alignment is the most suitable with the least impact on landowners, local communities and natural habitats.

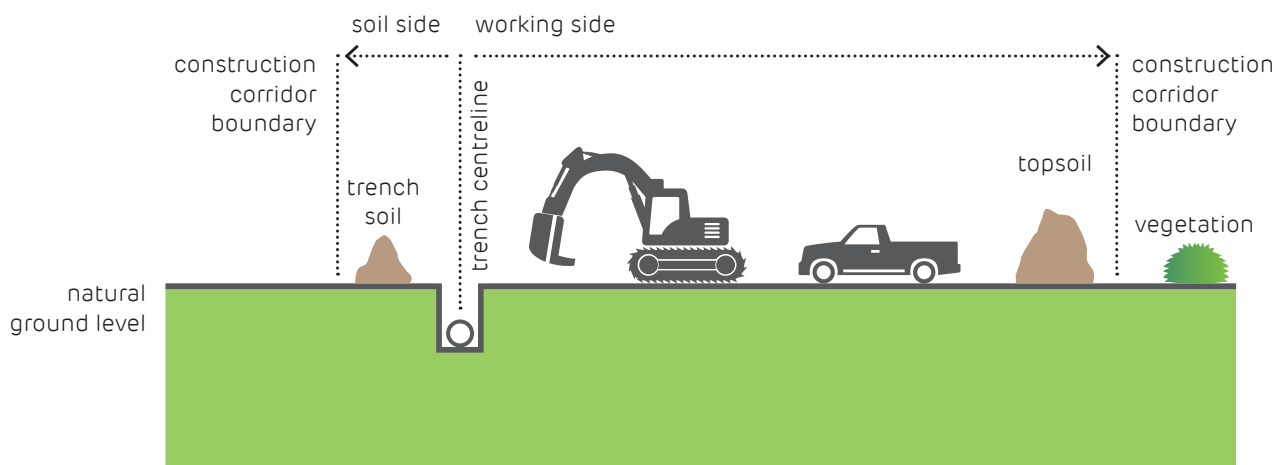


Construction

The pipeline will be buried for its full length of 110km which will allow grazing and cultivation to continue.

A temporary construction corridor will be established to provide space for vehicle access, topsoil management and stringing together the pipeline.

We will use existing tracks and access roads where possible to minimise environmental impacts and increase efficiencies.



Working with governments and community

Governments

We have worked and continue to work with all three levels of government - local councils, state and federal - to secure relevant permits and ensure we meet all legislative requirements.

Landholders

We have undertaken various investigations on landowner properties and established mutually agreed outcomes.

Land agreements are in place with landholders directly impacted by the NGWS.

Indigenous groups

We have engaged with two Indigenous groups who are connected to the land that the pipeline will traverse through:

1. Wangan and Jagalingou People
2. Jangga People

We also have a Cultural Heritage Management Plan (CHMP) in place for the project.

The construction and operation of NGWS will not extinguish any Native Title along the 110km alignment.

Public consultation

Public consultation was completed as part of the approval process for the Belyando Junction Dam. No submissions were received.

Targeted consultation was also undertaken as part of the water licence approval process with surrounding (including downstream) users.

We will continue to engage with government, landholders and the Indigenous groups during construction and operation.

Management and mitigation measures

The NGWP details a wide range of practical actions to minimise environmental impacts:



Pre-clearance surveys



Wildlife spotters and catchers onsite during construction



Erosion and Sediment Control Plan



Environmental Management Plan



Minimise open trench periods



Weed and pest control measures



Disturbed area to be rehabilitated

We have committed to rehabilitation of the construction corridor when the project is completed.

After construction of the pipeline, normal agricultural operations will resume within the easement.