Briefing paper:

Black Mountain Energy's fracking proposal in the Kimberley

Imminent Government decisions on the 'Valhalla' gas project

Both the Federal and WA governments are currently assessing a proposal from **Texas-based Black Mountain Energy (BME)** to drill and frack twenty gas wells in the Kimberley. The **'Valhalla'** project would be located in the catchment of the **Martuwarra Fitzroy River**, a National Heritage-listed river. If approved, this would be the first major fracking project in the Kimberley – paving the way for thousands of frack wells, a 1,000 km gas pipeline to the Pilbara, and the US-style industrialisation of this globally-renowned region. The Kimberley onshore gas resource has been compared to huge US gas basins with thousands of frack wells.

Final Federal and State decisions on whether to approve this toxic project are expected in the second half of 2025. Federal Environment Minister Watt and WA Environment Minister Swinbourn will make the respective final decisions, in consultation with other Ministers.

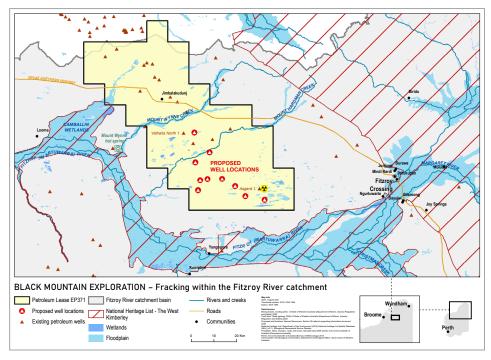
The Project

- Initial 20 exploratory frack wells, each well \sim 2-3 km deep with a further \sim 3-5 km horizontal
- Targeting 'tight gas' in the massive Canning basin formation which underlies the West Kimberley
- Using 100,000,000 litres (100 ML) of fresh groundwater per well for fracking; 2 BILLION litres total
- Thousands of tonnes of chemicals & water pumped downwell at massive pressures to fracture gas-bearing rocks
- Risk of contaminating aquifers, springs and surface waters, including iconic Martuwarra Fitzroy River
- ~1.6 million tonnes of GHG emissions from drilling and fracking alone – and this would be just the start
- Multiple threatened species known or likely in the project area, including Greater bilby and Freshwater sawfish
- Located in an area recently experiencing extreme weather events including record flooding and heatwaves.

The Assessment

In February 2025 the Valhalla project was declared a **Controlled Action** under the Federal EPBC Act. Four 'Matters of National Environmental Significance' (MNES) were found to be at risk of significant impact: Threatened & migratory species; National Heritage place; Water resources. In March 2025 the Department (DCCEEW) wrote to BME requiring more information due to glaring flaws in the original documentation. This new information will be released for a 10 day public comment period.

At the same time as the project is approaching final decisions at a federal level, the parallel WA EPA assessment process which began in 2021 is also nearing completion. Government approval at both levels is required for the project to proceed.





This is what a fracked landscape looks like. Wyoming oil and gas fields.

Aquifer risks not understood by proponent

Contamination of groundwater aquifers is a key risk of fracking. BME's own study (INTERA 2024) highlights the almost complete ignorance of local aquifers, how they may be connected and what the risks of contamination are:

Water quality data presented in Taylor et al. (2021) is relatively sparse for the aquifers near the project site, and there is insufficient data or information to determine if there are vertical interactions between the two formations or to develop aquifer parameters to model any vertical flows between the aquifers...There is a considerable amount of uncertainty about groundwater conditions, boundary conditions, and aquifer parameters and parameter variability at the site, which in turn creates predictive uncertainty in the models. [INTERA (2024): Revised modelling of drawdown impacts]

Martuwarra Fitzroy River – iconic National Heritage river

The Kimberley is a globally significant region with outstanding and unique natural and cultural values. In 2011 a substantial portion of the Kimberley, **including Martuwarra Fitzroy River**, was placed on the National Heritage list: **The West Kimberley National Heritage Place** ('WKNHP').

As stated by the First Nations-led Martuwarra Fitzroy River Council,

Martuwarra (Fitzroy River) is an iconic, heritage listed and unregulated river system of global significance. The environmental and cultural values are recognised under both the WA Aboriginal Cultural Heritage Act and National Heritage Listing... The River must be protected for the benefit of all present and future generations...The MFRC has identified three major threats to Martuwarra: mining; water extraction; fracking.



Mount Hardman Creek - key tributary of Martuwarra Fitzroy River

Mount Hardman Creek, a recognised 'groundwater dependent ecosystem' (GDE), flows through BME's fracking project area. It is an extremely significant waterway with seasonal habitat for the threatened Freshwater sawfish and many other species. Two of the proposed frack well sites are within 2.5km of the creek. Under future expansion plans, many more wells are likely in its vicinity. A HydroGeoEnviro report states:

Mount Hardman Creek could be seasonally highly dependent on groundwater discharge in some areas to maintain baseflow and/or extend the duration of ephemeral pool persistence. **The risk of a high volume 20 well project would be much greater at Mount Hardman Creek.** [HydroGeoEnviro (2024). Review of impact risks for the Valhalla Project]



Mount Wynne seep - evidence of aquifer connectivity ignored

The Mount Wynne hot spring and gas seep is a highly significant Aboriginal heritage site near the western boundary of the 'Valhalla' project area where hot water and methane gas bubble to the surface. Chemical analysis of the seep has found evidence of connectivity between the water and gas emerging at Mount Wynne and the deep aquifers and gas reserves being targeted by BME.

Based on the isotope data it appears there is a likelihood of connection between the shale gas resource targeted in the onshore Canning Basin, and the Mount Wynne seep at the surface... Shale gas extraction and hydraulic fracturing may therefore have potential to cause impacts such as drying up of the seep or, in the long-term, contamination of the seep and any other similar connected surface features in the region that are similarly connected to deep parts of the basin.

[Prof. Matt Currell (2022). Interpretation of Canning Basin onshore gas geochemistry/isotope data]

Despite the evidence presented, BME has ignored the Mount Wynne hotspring in its documents and dismisses any contamination risk to the hotspring or Martuwarra Fitzroy River.

Extreme weather; extreme emissions

An analysis by Climate Analytics (Fracking the Kimberley, 2024) shows that if the Canning basin is fully developed it could produce up to 900,000,000 tonnes of CO2e (Scope 1 + 3) over 20 years, or twice Australia's total annual GHG emissions. The 'Valhalla' project, if approved, would be just the start of a huge new Australian 'carbon bomb'. At the same time as a new source of emissions is being proposed, the Kimberley is experiencing extreme weather, including record flooding in 2023:

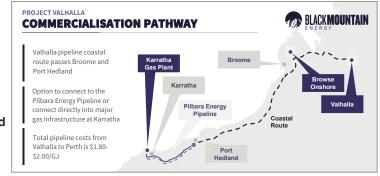
Multiple sites in the Kimberley recorded 10-day (to 6 January) rainfall totals in excess of 300 mm to 600 mm, their **highest** 10-day totals for any month on record; a total of 838.8 mm at Dimond Gorge (northeast of Fitzroy Crossing in the Fitzroy River Catchment) was almost equivalent to its average annual rainfall. [BOM, February 2023]

If a fracking project commences in this region there is an increasing likelihood it will be impacted by extreme weather events, adding to all the project's environmental, social and employee risks.

Black Mountain's gas industrialisation plans – a threat to the region

BME is on record talking up its future expansion plans if it succeeds in proving a commercially-viable gas resource at 'Valhalla'. The company has promoted constructing a gas export pipeline from the 'Valhalla' project to the Pilbara, a distance of \sim 1,000 km.

Black Mountain's 'Valhalla' proposal and expansion plans pose a direct threat to the Kimberley's recognised global destination status and an established nature-based tourism industry earning hundreds of millions of dollars annually and employing hundreds of local people.² There is enormous scope for the development of sustainable industries in the Kimberley, employing local people and protecting the region's outstanding natural and cultural values.



Black Mountain's development plans (Good Oil Conference presentation, 2022)

^{2 &}quot;Tourism is one of the major industries in the Kimberley, with ~12% of the region's employment and 10% of gross business revenue. 544,000 visitors spend >\$563 million per year. About 1,500 people are employed in tourism of whom 145 are Aboriginal." [REF: Assessing tourism potentials in the Fitzroy Valley (2021). Curtin University Tourism Research Cluster]

