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The Chief Executive
Department of Environment and Science
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Attn: The EIS Coordinator (Lake Vermont Meadowbrook Project)
By email only: eis@des.qld.gov.au

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Submission on Lake Vermont Meadowbrook Project EIS

Queensland Conservation Council welcomes the opportunity to comment on the Lake Vermont Meadowbrook Project (the Project) Environmental Impact Statement (EIS). Queensland Conservation Council is the peak body for environmental groups in Queensland and has been supporting communities to protect their environment since 1969. We believe that Queensland can and must be powered by 100% renewable energy by 2030 to achieve a safe climate future.

We call on the Department of Environment and Science to reject the Project on the following grounds:

1. It is not consistent with Queensland's commitments under the Paris Climate Agreement
2. It will make it much harder for Queensland to meet our existing emissions reduction targets
3. Its significant impacts on wetlands and habitat connectivity in central Queensland have not been adequately minimised or offset

Inconsistent with Paris Agreement

Queensland communities and iconic environments such as the Great Barrier Reef and Wet Tropics World Heritage Area, are already suffering climate impacts. The Great Barrier Reef has suffered four devastating bleaching events in just seven years, including in a La Nina cycle¹. In 2019, at the end of the last El Nino cycle, bushfire penetrated the Wet Tropics². Thousands of Queenslanders are still rebuilding after destructive floods in 2021 and 2022. The latest Intergovernmental Panel on Climate Change (IPCC) report gathered more evidence about the escalating impacts, particularly to the Great Barrier Reef, likely if we exceed 1.5 degrees of warming. To have a chance of saving the Great Barrier Reef, we need the Queensland

¹ Climate Council (2022) [No region spared](#).

² Guardian (2019) [World Heritage Queensland rainforest burned for 10 days and almost no one noticed](#)

Government to reach our international obligations under the Paris Agreement to limit warming to 1.5 degrees.

The Project would create over 294 million tonnes of downstream emissions, or nearly 8 million tonnes per year if approved. That's almost twice the annual impact of Australia's domestic aviation industry in 2021 (4.4 Mt CO₂e). The International Energy Agency is unequivocal: we cannot build new coal if we are to keep warming below 1.5 degrees³.

The Terms of Reference require the EIS to 'identify and describe the values that must be protected for all the relevant matters, including environmental values specified in the EP Act'.⁴ Under Section 9 of the EP Act, an 'environmental value' includes a 'quality of physical characteristic of the environment that is conducive to ecological health or public amenity or safety'. Keeping greenhouse gasses below the 1.5 degree threshold required to maintain a safe climate meets the definition of a 'physical characteristic of the environment' that is 'conductive to ecological health' and public safety. Greenhouse gas levels must be considered an environmental value for the purposes of the EP Act.

The EIS therefore fails to fulfill the ToR by not assessing the impacts of the Project on all environmental values, including a description of nature and scale of each impact, its intensity and duration, the cumulative effects of the Project in combination with other developments, and the potential for secondary, permanent and/or irreversible impacts.⁵

This mine cannot be approved if Queensland is to maintain consistency with its 1.5 degree commitments.

This mine is one of 11 projects being reconsidered by the Federal Environment Minister Tanya Plibersek. On the strength of evidence gathered by the Environment Centre of Central Queensland and Environmental Justice Australia, demonstrating the climate impacts on a huge range of threatened and iconic species and ecosystems, Plibersek agreed to consider whether climate impacts should be part of these approvals. The Queensland Government should not make a decision on the EIS until the Federal Minister has handed down her decision.

It will make it harder to meet Queensland's emissions reductions targets

Queensland's 30% emissions reduction target by 2030 on track to net zero by 2050 is deeply inadequate and not aligned with a 1.5 degree trajectory. Approving this mine will make it even harder for Queensland to meet even these weak targets.

³ International Energy Agency (2021) [Net Zero by 2050](#)

⁴ Final terms of reference for the proposed Lake Vermont Meadowbrook Project (2020), 12.

⁵ Ibid, 12.

If the Project goes ahead, the total scope 1 and 2 emissions from the expanded Lake Vermont mine will average more than 650,000 tonnes of avoidable greenhouse gas emissions, every year until 2061. This includes nearly 350,000 tonnes from the new mine workings, totalling 13 million tonnes over the life of the Project.

This means that Queensland households and other industries will have to reduce emissions by an additional 350,000 tonnes per year, if the Project goes ahead. This will have a significant economic impact on the regional and state economy.

Beyond 2030, the picture becomes even grimmer, as Queensland and the rest of the world attempt to reduce emissions to net zero by 2050. On a linear path from 30% reduction in 2030 to net zero by 2050, Queensland will have to reduce emissions by nearly 7,000,000 tonnes per year. The additional emissions from the Project would add 5% to our annual emissions reduction challenge between 2030 and 2050. If instead, this mine was not approved and the existing Lake Vermont project allowed to close in a way that is well managed and planned with the community, the emissions reduction task will reduce by nearly 5%.

Methane is not accurately forecast

The figures above are based on emissions reported in the EIS. However, most of these emissions are methane leaking from the mine site. Methane is a much more potent greenhouse gas than carbon dioxide, particularly in the short term. The EIS uses the 100-year factor to convert methane to carbon dioxide equivalent (CO₂-e), at 30 times more potent than carbon dioxide, but the 20 year factor is 82, more than three times higher⁶.

The EIS should include a more accurate calculation of global warming likely to be caused by the mine in the time frame of Queensland's emissions targets, using the 20 year factor.

Ember's 2022 research further showed the significant underestimation of methane from coal mines in Queensland. The EIS should include more detail on how the site has been assessed to determine likely methane levels, and improved measurement techniques.

Emissions Reductions are not prioritised

The Terms of Reference require the proponent to 'propose greenhouse gas abatement measures'⁷. However, the EIS section 'GHG mitigation and management'⁸ only presents generic points about the decarbonisation of the resource sector, most of which have already been presented in Queensland Government documents.

⁶ Ember (2022) [Tackling Australia's methane problem](#)

⁷ Final terms of reference for the proposed Lake Vermont Meadowbrook Project (2020), 25.

⁸ Jellinbah, *Meadowbrook Project Environmental Impact Statement* (2023), section 13.5.2.

The 'commitments' made in the EIS are predominantly cost savings for the proponent through efficiency and coordinated planning. There are no clear commits to reduce methane on site beyond vague proposals to 'acquire carbon credits' or flare coal mine waste gas 'when practicable'. There is no further detail on what 'practicable' means here or how it would be assessed.

The failure of the Proponent to propose meaningful emissions reductions shows that the project is not in line with the *Queensland Resources Industry Development Plan* (QRIDP) which committed to develop a decarbonisation plan application to resources projects including coal mines, to drive reductions in Scope 1 and 2 emissions in line with Queensland's climate ambitions.

The project proposed no credible mitigation measures or alignment with Queensland's emissions targets or decarbonisation policies so must be refused.

Unacceptable impacts on central Queensland

Water

The EIS does not provide sufficient information on the consequences of the impacts on surface waterways on local and regional ecosystems. For example, the EIS models subsidence likely to occur but does not describe how this is likely to affect fauna, flora and flood flows on surrounding ecosystems and downstream areas.

The EIS also notes that there are wetlands in the vicinity of the Project, including some that may be affected by subsidence or groundwater drawdown, but does not identify the environmental values of these wetlands or how these values could change.

This does not give sufficient information on whether the Project has adequately minimised environmental impacts or should be granted an environmental authority.

Flora and Fauna

The Bowen Basin is a highly fragmented and cleared landscape, as is much of Australia. In the last two years, this fragmentation has led to the koala and greater glider being reclassified from vulnerable to endangered, due to the impacts on climate change and the consequent severe weather and fire events, as well as direct clearing. In the Bowen Basin, the destruction is stark. 78.7% of vegetation has already been cleared in the Isaac-Comet Downs Brigalow Belt subregion (Accad *et al.* 2021).

This Project will result in the disturbance of 562 ha, including direct disturbance to 109.1 ha of remnant vegetation, and more than 100 ha of habitat loss for each of the endangered species: ornamental snake, greater glider and koala.

Further clearing and disturbance is already occurring at the Olive Downs Coking Coal Project and the Vulcan Coal Complex Project, with the proposed Saraji East Project and the Winchester South Projects under assessment at present. The EIS assessment of the cumulative impacts on threatened species and communities is misleading and does not adequately demonstrate that the cumulative impacts are “minimal and not significant”. A more thorough assessment of the cumulative impacts is required before even more of our Queensland ecosystems and species are added to the endangered list, or worse, they make the extinct list.

Offsets

Of particular concern are the offsets proposed to deal with the significant residual impacts on these species. The proposed offset strategy appears to use ‘averted loss’ offsets, where areas of existing habitat are preserved to compensate for the destruction of habitat elsewhere. Such offsets are widely considered to be ineffective and have recently been explicitly rejected by the Federal Government. Even within this there is no effective management strategy proposed to deal with weeds, fire risk and fauna movement through these offsets areas.

These offsets do not effectively provide quality habitat for threatened ecosystems and species, and do not offset the significant impacts described above.

Based on the above concerns about global climate change, the ability of Queensland to meet our emissions reduction targets and impacts on Queensland water, flora and fauna, the Project should not be approved. Please get in touch with Energy Strategist Clare Silcock on clare.silcock@gldconservation.org.au to discuss this submission.

Yours sincerely,



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