

Traditional Custodians Call for a Moratorium on LNG Production and Best Practices at Murujuga



Save Our Songlines



Fig. 1: The lower Burrup Peninsula with massive LNG industrial facilities encroaching into the rock art area.

Map: Google Earth / Bradshaw Foundation

The extraordinary Murujuga rock art and cultural heritage landscape in the Northwest of Western Australia was finally inscribed on the World Heritage List at the UNESCO meeting in Paris 2025. The ICOMOS evaluation report on the Murujuga nomination was clear that the site displayed outstanding universal values. Murujuga contains the largest and oldest collection of rock art in existence; over 1 million petroglyphs documenting a continuous record of human occupation for over 50,000 years. Hundreds of images of long extinct megafauna, as well as the earliest known representations of the human face are among its treasures. Clearly the site is worthy of the highest recognition, however ICOMOS also advised of serious concerns.

The nomination was controversial because of impacts to the heritage values from the ongoing operation and expansion of

the largest liquefied natural gas (LNG) processing and petrochemical hub in the Southern Hemisphere. Five existing very large industrial facilities, and one currently under construction occupy a vast area at the centre of Murujuga. Despite the ongoing expansion of this industrial footprint, the industrial zoned land still contains thousands of petroglyphs and remains part of the cultural heritage landscape. While this industrial area was excised out of the World Heritage site boundaries, lines on maps do not provide a barrier to the highly acidic industrial emissions released from these facilities and their ongoing impact on rock art within the boundaries of the heritage site.

In recognition of these industrial impacts, ICOMOS recommended the listing be deferred until action was taken to address them. The draft recommendations included 'ensuring the total removal of degrading acidic emissions', 'preventing

further industrial development' and 'developing an appropriate decommissioning and rehabilitation plan for existing industrial activities'. Rather than addressing the concerns, this instead prompted a major lobbying exercise led by the Australian Government to convince UNESCO that polluting industry could continue at Murujuga, and that ICOMOS' management actions were unnecessary.

This effort was successful in achieving the inscription with much weaker management recommendations, however the reality on the ground at Murujuga is one of ongoing and extended damage and desecration of what is arguably the world's most significant rock art site. Immediately after the listing, the Minister provided new approvals to extend the operating life of the largest pollution source on Murujuga to 2070, Woodside's North

West Shelf extension project, with an accompanying exemption for damage caused by industrial pollution under Australia's Aboriginal heritage laws. Conditions attached to the new approval allow ongoing emissions at levels which the Minister admits will continue to damage the rock art, and many times higher than is required at other similar facilities. While extended impacts from industrial emissions have been guaranteed, assurances provided to UNESCO by the Australian Minister for Heritage have turned out to be unreliable.

The controversy surrounding the Murujuga nomination reflected concerns that have been raised by independent scientists and Traditional Custodians for over 20 years regarding the effects of acidic industrial emissions on the rock art. By 2016, retired museum director Dr. Ian Mcleod said the rock art decay was as 'sure as night follows day'¹. For years, industry and government regulators had denied and downplayed these impacts, however the growing body of scientific evidence was becoming impossible to ignore. In 2020, Government and industry established a new Murujuga rock Art Monitoring Program (MRAMP), however it would take three years to produce its first report.² This found that no site on Murujuga was free from the impacts of industrial pollution, and recommended further research on those impacts.

This finding was inconvenient for government-backed industry operating at Murujuga. Multinational oil and gas companies Woodside, Chevron, BP, Shell, Mitsubishi and Mitsui were seeking environmental approvals to extend the operating life of their giant North West Shelf LNG facility for a further 50 years. The construction of this facility in the heart of Murujuga without the consent of Traditional Owners in the 1980's led to the destruction of an estimated 4-5 thousand of petroglyphs.³ At the time, the potential for industrial emissions to cause ongoing damage to the remaining rock art was not considered, and later expansions would result in the release by the facility of over 20 tonnes of highly acidic compounds every day into the atmosphere over Murujuga. In addition, the North West Shelf extension was strongly opposed by leading Australian environment groups due to its climate impacts, with Australian Conservation Foundation (ACF) naming it as the largest 'carbon bomb' in the Southern Hemisphere⁴ as part of a major public campaign against the proposal.

The long-awaited 2024 MRAMP report provided further damning evidence about the impact of industrial emissions at Murujuga, however government authorities continued to downplay the findings. An executive summary of the report written by the government agency charged with regulating industry omitted key data, and incorrectly claimed that damage to the petroglyphs could be attributed to historical emissions rather than current industry.

This led to an uproar in the scientific community. A senior scientist involved with the study told the Australian Broadcasting



Fig. 2: Proximity of the LNG facilities to the Murujuga rock art.

Photo: Save Our Songlines



Fig. 3: An ancient petroglyph, where a ferromanganese layer has formed over the original engraving to show only a contour contrast (centre) and where the right portion of the petroglyph has been removed by flaking of the rock varnish due to chemical processes from industrial emissions.

Photo: K. J. Mulvaney, 2016

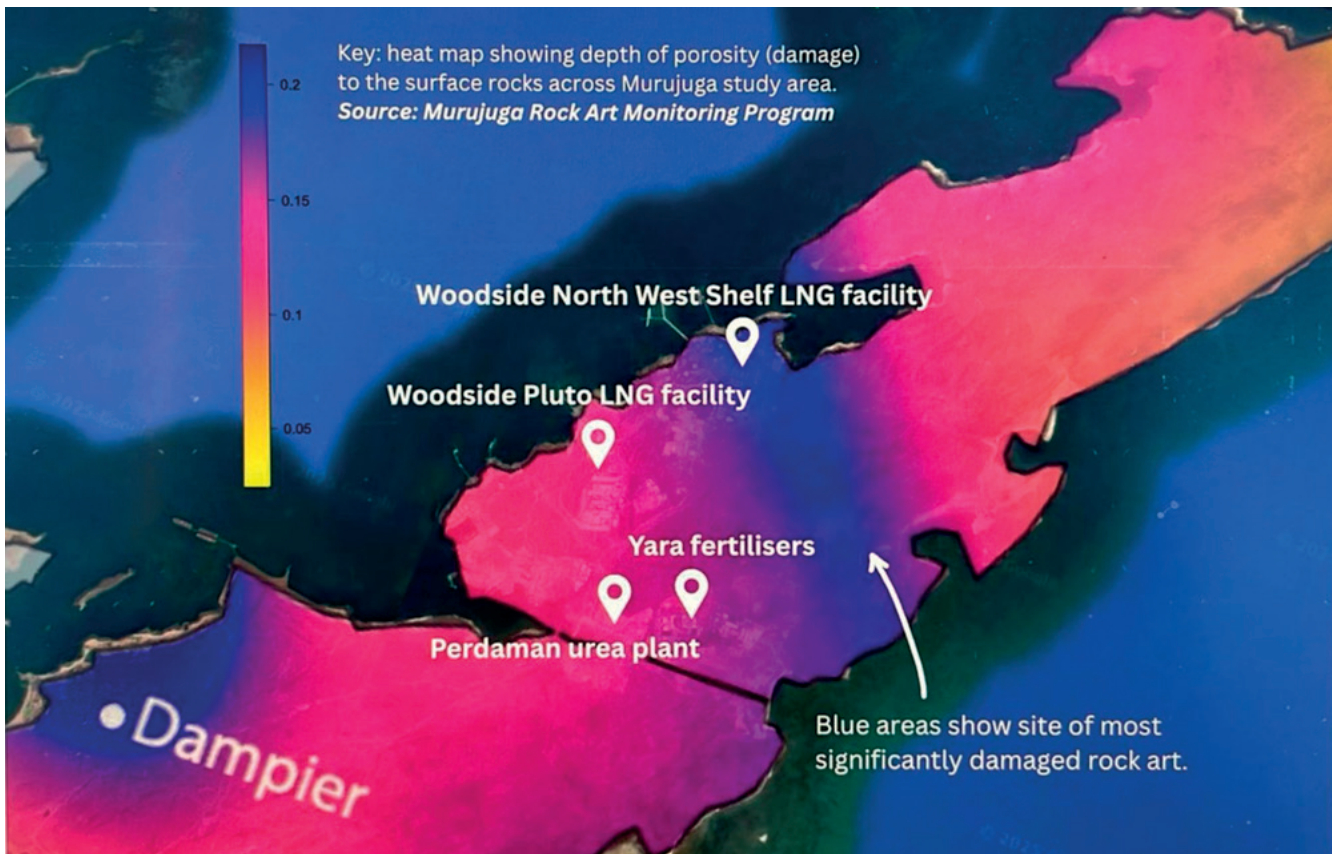


Fig. 4: Murujuga Rock Art Monitoring Program heat map of rock art damage with industrial projects overlaid.

Map: Kelly Warden, see also: <https://www.wa.gov.au/government/publications/murujuga-rock-art-monitoring-program-monitoring-studies-report-2024>

Corporation (ABC) *"The claim that we established that no further damage is occurring to the rocks is simply false."*⁵ Ben Smith, Professor of World Rock Art and President, ICOMOS Scientific Committee for Rock Art accused the government of doctoring the results.⁶ Later, the head statistician with the MRAMP project publicly quit, saying the findings were a 'smoking gun' that the government had attempted to cover up⁷. He told the ABC that *"[m]isstating the results of an expensive scientific investigation is unacceptable and I think that's what's happened."*

Despite this controversy, Australia's Minister for the Environment and Heritage Murray Watt embarked on a major international lobbying exercise⁸ to ensure that the Murujuga World Heritage bid would not prevent further industrial development on Murujuga. This effort included a 'factual errors' letter to ICOMOS⁹ and a series of meetings with ambassadors in the lead up to the Paris meeting. The Minister incorrectly claimed at the time *'the scientific evidence ... shows that there is [no] impact and will be no impact from the industrial activity more broadly, not just the North West Shelf project'*¹⁰ and that the MRAMP report *"is clear in saying industry can coexist with the rock art, without damaging it."*¹¹ and that the MRAMP report *"is clear in saying industry can coexist with the rock art, without damaging it."* The Minister briefed UNESCO delegates on the

'strict conditions' that he would place on the North West Shelf extension to protect world heritage values¹²

ICOMOS stood by its findings and recommendations. However, the Minister succeeded in convincing UNESCO to replace the draft resolution with a far weaker one that would accommodate continued industrial operations and new approvals at Murujuga.

Shortly after returning from the Paris meeting, Minister Watt gave his final approval for the North West Shelf extension to continue operating until 2070. The 'strict conditions' promised by the Minister had been dramatically watered down following 'heavy political lobbying' from Woodside¹³, which claimed that the expense of pollution control equipment could not be justified. Analysis of the conditions by independent charity Friends of Australian Rock Art indicates that the approval allows ongoing acidic pollution at levels up to 15 times greater than comparable facilities operating in America and elsewhere.

Contrary to the assurances provided by the Australian Government to UNESCO, even the Minister's own Statement of Reasons for the decision to approve the North West Shelf extension¹⁴ confirms that the Murujuga rock art would be exposed to extended and additional impacts from industrial emissions. The

Minister says “I note that there are multiple lines of scientific and other evidence suggesting that nitrogen oxides (NOx), sulfur oxides (SOx), and other acidic airborne emissions are having a significant adverse impact on the rocks of Murujuga. And “I note the department’s advice that the taking of the action, despite proposed avoidance and mitigation measures [...], is likely to result in residual impacts to the values of the National Heritage Place”.

The Minister had also assured UNESCO that Australia’s environment and heritage protection laws were ‘world leading’, how-



Fig. 6: Raelene Cooper pointing at the acidic smoke plume emanating from the North West Shelf LNG Plant. Photo: Save Our Songlines

ever under these laws the Minister was not required to consider the newly inscribed World Heritage listing or the impact of the proposal on the World Heritage values in his decision. In the end, the Minister considered that Woodside’s claimed economic benefits of the proposal outweighed the ongoing damage to Murujuga petroglyphs.

On the same day that the Minister approved the North West Shelf extension, he also made a declaration under Australia’s Aboriginal heritage protection laws (known as a “Section 10 declaration”). This responded to an application submitted over 3 and a half years earlier by Traditional Custodian, Mardat-hoonera woman and previous Chair of the Murujuga Aboriginal Corporation (MAC) Raelene Cooper together with Save our Songlines (SoS). In a case brought by Cooper, the Federal Court of Australia had previously ruled that the Minister had unlawfully delayed the application with no adequate explanation,¹⁵ finding the Minister’s delay was “the consequence of oversight and neglect.”¹⁶

During the period of unlawful delay, chemical and fertiliser corporation Perdaman (which had already removed removed rock art from its construction site on Murujuga ¹⁷) was allowed to destroy a highly significant *Fish Thalu* sacred site to make way for its fertiliser plant. The Minister’s Explanatory Note for the *Murujuga Declaration* found that the site warranted federal protection (including because the state legal regime was too weak), but the unlawful delay meant the *Fish Thalu* site was destroyed while Cooper waited for a decision.

The Minister’s Statement of Reasons for the *Murujuga Declaration* ¹⁸ includes a finding that ‘The whole of the specified area [Murujuga] is under threat of injury or desecration on the basis of activities related to industrial emissions from all ongoing and proposed industrial facilities’. Despite this, impacts of industrial emissions were exempted from the Declaration, ensuring it would not interfere with existing and planned industrial operations at Murujuga.

In a statement, Cooper called the exemption ‘offensive’:

“The Minister has provided an explicit, offensive exemption in my Section 10 Declaration for industry to keep causing damage to the rock art through industrial emissions. It is a deliberate decision by the Minister to further protect industry at the expense of Murujuga’s World Heritage rock art. If there is no damage occurring, why is this exemption required? This clearly demonstrates the Government has no confidence in the conditions on Woodside to protect the rock art. Cooper continued “This decision is a slap in the face. It allows Woodside to continue operations and pollution to 2070. It is a crime against Murujuga and a crime against humanity. This is not just destroying Murujuga country, but will impact communities all around the world. It is a shameful act and a shameful decision. It is a betrayal of Aboriginal people, it is a betrayal of our Elders, it is a betrayal of future generations. It is a betrayal of all Australians.”

It is clear that the serious threats and impacts to the Outstanding Universal Values at Murujuga are ongoing, and have been further extended and guaranteed as a result of decisions taken by the Australian Government following the inscription of the site on the World Heritage list. With the expert ICOMOS recommendations largely set aside, there is no plan to remove emissions from the site, to prevent further industrial development, or to develop a decommissioning plan for existing facilities. Management plans for the site elevate the interests of industry over the need to protect the rock art, and the government monitoring program is subject to ongoing concerns regarding interference and manipulation. It has even been suggested that the site’s inscription on the World Heritage list has enabled expansion of the very industry that is harming the site in a way that compromised the UNESCO process, with the successful listing (with weakened protections) helping to minimise criticism for the controversial North West Shelf extension approval in Australia. ¹⁹

Efforts by civil society groups and Traditional Custodians to address the threats to Murujuga are continuing in Australia, including through legal challenges to approvals for the North West Shelf extension by charities Friends of Australian Rock Art and ACF.

Save our Songlines strongly supported the draft resolution from ICOMOS regarding the management of industrial threats at Murujuga. SoS calls for those recommendations to be revisited and reinstated by UNESCO and for the site to be recognised on the World Heritage in Danger list until this occurs.

In addition, we call for the following urgent actions by the Australian Government with the support and oversight of UNESCO:

1. Place a moratorium on any further industrial development at Murujuga, including preventing the processing of gas from any new fields at Murujuga.
2. For the processing of remaining gas in fields already under production, ensure all LNG operations at Murujuga are re-

quired to install best practice electric-drive systems and/or Selective Catalytic Reduction (SCR) scrubbers to eliminate acid gas emissions within three years. This is not currently required.

3. Develop a decommissioning and rehabilitation plan for all industry on Murujuga in consultation with Traditional Owners.

It is hoped that UNESCO members and civil society organisations around the world will maintain close scrutiny on the management of industrial threats at Murujuga, and support these actions to be implemented as a matter of urgency.

Save our Songlines (SoS) is a group of independent Traditional Owners with ongoing cultural and spiritual connections to Murujuga and cultural responsibility for its protection. Our mission is to protect, practice and preserve culture at Murujuga for future generations. SoS advocates for greater protection of the Ngurra, including rock art, songlines, health, climate and culture from the impacts of inappropriate industrial development.

Notes

- 1 Australian Broadcasting Corporation (2016) Rock art decay 'sure as night follows day', says retired Museum boss <https://www.abc.net.au/news/2016-12-10/burru-peninsula-rock-art-concerns/8107114>
- 2 Government of Western Australia (2023) Murujuga Rock Art Monitoring Program: Summary Monitoring Studies Report 2023 <https://www.wa.gov.au/system/files/2023-12/murujuga-rock-art-summary-monitoring-studies-2023.pdf>
- 3 Parliament of Australia (2018) Senate standing Committee on the Environment and Communications report: Protection of Aboriginal rock art of the Burrup Peninsula https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/BurruPeninsula/Report
- 4 Australian Conservation Foundation and Verstegen (2024) Woodside's Burrup Hub carbon bomb in perspective https://canopy.acf.org.au/m/37591d36acabfc5a/original/ACF_Burru_Hub_report.pdf
- 5 Australian Broadcasting Corporation (2025) Rock art expert says WA government doctored elements of Murujuga rock art report <https://www.abc.net.au/news/2025-05-27/murujuga-rock-art-benjamin-smith-government-cover-up/105342280>
- 6 Australian Broadcasting Corporation (2025) Top statistician breaks silence over Murujuga rock art study near Woodside gas plant <https://www.abc.net.au/news/2025-10-02/murujuga-rock-art-study-woodside-government-interference/105806508>
- 7 UNESCO (2025) Factual Errors Letters, Forty-seventh session, Paris 6-16 July 2025 <https://unesdoc.unesco.org/ark:/48223/pf0000395242>
- 8 The Australian (2025) Watt tees up heritage support https://www.theaustralian.com.au/subscribe/news/1/?source-code=TAWEB_WRE170_a&dest=https%3A%2F%2Fwww.theaustralian.com.au%2Fnation%2Findigenous%2Fmurray-watt-woos-am-bassadors-ahead-of-world-heritage-call-on-burru%2Fnews-story%2F572b67e13db9a387f4823e4241187b7a8memtype=anonymous&mode=premium&v21=GROUPB-Segment-1-NOSCORE&v21spcbehaviour=append
- 9 The guardian (2025) Murray Watt ramps up lobbying efforts in last-minute push to get Murujuga rock art on world heritage list <https://www.theguardian.com/australia-news/2025/jul/08/murray-watt-ramps-up-lobbying-over-wa-murujuga-rock-art-complex-unesco-world-heritage-listing>
- 10 The Sydney Morning Herald (2026) Released emails reveal heavy political lobbying as massive gas project extended <https://www.smh.com.au/environment/climate-change/released-emails-reveal-heavy-political-lobbying-as-massive-gas-project-extended-20260216-p502r1.html>
- 11 Australian Government (2025) Statement of Reasons for Approval of the North West Shelf Extension proposal under the Environment Protection and Biodiversity Conservation Act 1999 https://epbcpublicportal.environment.gov.au/_entity/sharepointdocumentlocation/918e907b-8b8f-f011-b4cb-00224893c1e5/2ab10dab-d681-4911-b881-cc99413f07b6?file=2018-8335-Statement-of-Reasons.pdf
- 12 National Indigenous Times (2025) Federal Court finds government unreasonably delayed ministerial decision on Murujuga application - "with no adequate explanation" <https://nit.com.au/25-08-2025/19835/federal-court-finds-government-unreasonably-delayed-with-no-adequate-explanation-ministerial-decision-on-murujuga-application>
- 13 Australian Government (2025) Murujuga Declaration made under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984. <https://www.dcceew.gov.au/parks-heritage/heritage/indigenous-heritage/murujuga-cultural-landscape-declaration-2025>
- 14 Neighbor (2026) The very model of a modern Labor general <https://www.themonthly.com.au/april-2026/essays/very-model-modern-labor-general>
- 15 National Indigenous Times (2025) Federal Court finds government unreasonably delayed ministerial decision on Murujuga application - "with no adequate explanation" <https://nit.com.au/25-08-2025/19835/federal-court-finds-government-unreasonably-delayed-with-no-adequate-explanation-ministerial-decision-on-murujuga-application>
- 16 See <https://www.johnsonlegal.au/newsfeed/cooper-v-minister-for-environment-and-water> for more detail on the decision and links to the judgment
- 17 Smith et al. (2016) Murujuga's rock art is at risk - where is the outrage? <https://theconversation.com/murujugas-rock-art-is-at-risk-where-is-the-outrage-205476>
- 18 Australian Government (2025) Murujuga Declaration made under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984. <https://www.dcceew.gov.au/parks-heritage/heritage/indigenous-heritage/murujuga-cultural-landscape-declaration-2025>
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