

Windmills of our Times

The Industrialisation of the Nullarbor

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Photograph acknowledgement: Burning Wind Turbine, Breadalbane, NSW. NSW Rural Fire Service, January 5th 2023. Cave photo: C. Buswell

Introduction

In mid 2021 the global energy giant, InterContinental Energy (ICE), announced a major development for the West Australian side of the Nullarbor. They called on the services of Professor Peter Newman from Curtin University, a specialist in Sustainability, to add gravitas to this announcement. He stated: the development, extending inland from the Great Australian Bight [to near] Esperance, could produce up to 50 gigawatts of green energy, a capacity about 12 times the size of the current West Australian

power grid.¹ The only problem was, that the development was not for the production of electricity to help supply the WA power grid, it is to produce hydrogen and ammonia, all for export. The other

¹ Goodwin S. T., and De Landgraff T. *Expert says massive green energy hub project in WA could power Australia*. ABC ,Goldfields. Posted: Thursday 15 July, 2021 at 9:15am

problem, as we all know, is that the land earmarked for this development is the biggest piece of arid karst on earth.

Over the course of 2019-2022, the WA government changed its Land Administration Act 1997 (LAA), to encourage the diversification of industry away from solely grazing on pastoral and unallocated Crown lands. The change to the LAA allowed for a new type of land tenure known as a Diversification Lease. This new lease arrangement allows a lessee to engage in industries such as energy production and carbon farming². The new Act also allows for broad ministerial discretion in making determinations concerning the appropriateness or not of new industries on these lands.³

On May 24, 2020, Rio Tinto destroyed the highly significant Juuken Gorge caves. This destruction not only propelled issues of cultural heritage onto the Australian and world stages, but caused companies involved in mining and other destructive industries to take considerable care when negotiating land use agreements with Native Title holders. In Western Australia the destruction wrought by Rio Tinto happened to coincide with the review of its Aboriginal Heritage Act 1972, and the rights of veto allowed under Section 18, which enabled landowners but *not* aboriginal people to appeal any decisions made by any ministers involved. The new WA Aboriginal Heritage Act 2021 came into law on 1st July 2023, with a three-tiered level of investigation all requiring strong management processes when aboriginal heritage is found on any land in WA larger than 1100 square metres.. It removed Section 18, but still gives ministers powers of veto.

These three events have implications for the proposed industrialisation of the Nullarbor.

Stakeholders: Native Title Holders, Companies and Pastoral Lease Holders

The Nullarbor is Mirning Land. In Western Australia, native title was granted to the Mirning Traditional Lands Aboriginal Corporation, the Registered Native Title Body Corporate, (RNTBC), in 2017, after a 16-year battle. On the SA side of the Nullarbor, native title was granted in 2013 and resides with the Far West Coast Aboriginal Corporation (also the RNTBC).

The native title ruling on the WA Nullarbor granted three title types, as shown in the map below (Figure 1):

- Exclusive native title, in blue
- Shared native title, in yellow
- Excluded areas such as national parks, the townships of Eucla and Madura, in green

² The West Australian Government has funding available for carbon farming for lease holders. The carbon farming will not involve any new plantings, rather the sequestering of currently existing native vegetation. See: Government of Western Australia, Department of Primary Industries and Regional Development.

<https://www.agric.wa.gov.au/climate-land-water/land-use/carbon-farming>

³ West Australian Aboriginal Cultural Heritage. See: [Aboriginal Cultural Heritage Act 2021](#)

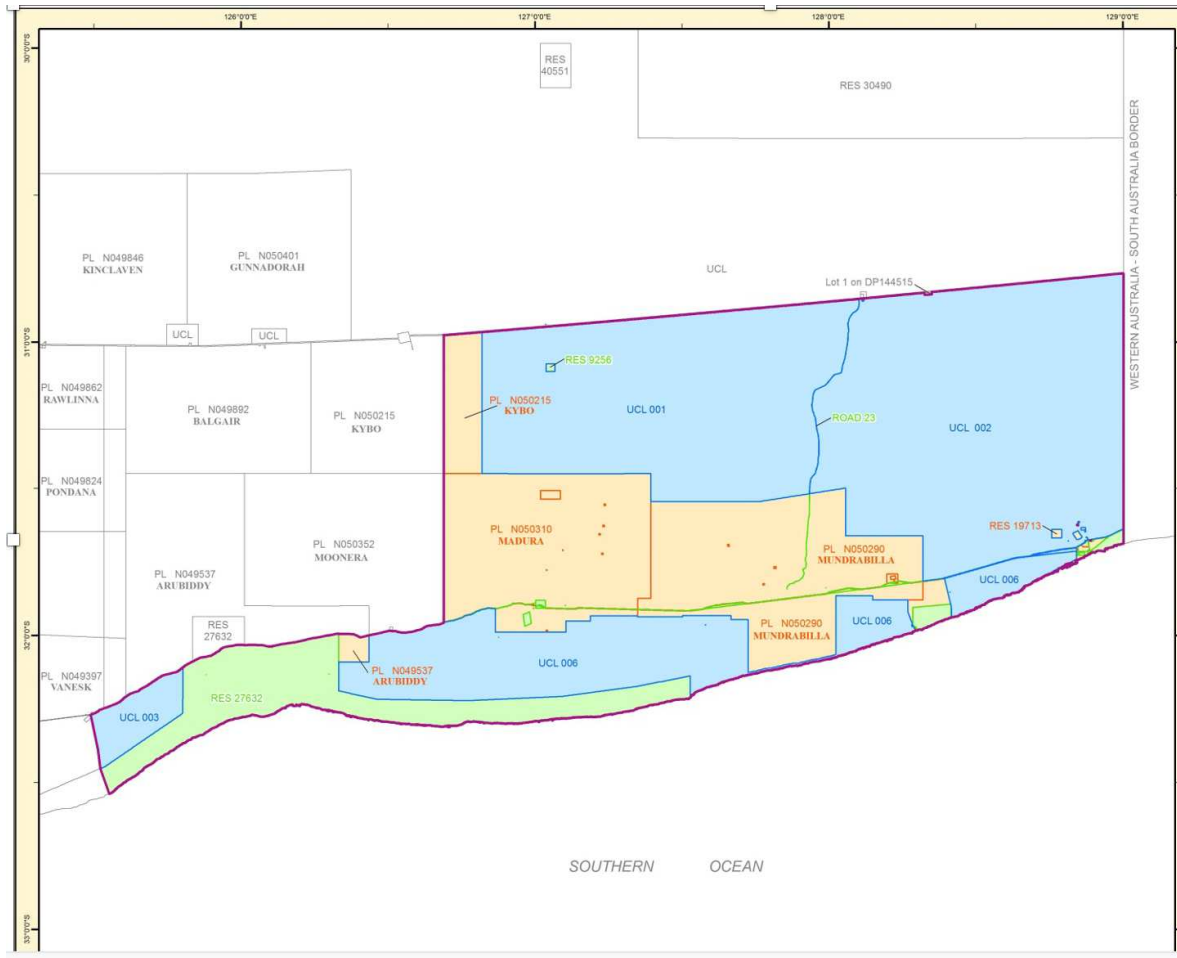


Figure 1: Mirning Native Title Types and Boundaries, Nullarbor Western Australia. Source: Native Title Determination. WCD2017/008. Federal Court of Australia. 2017. Schedule 2.

The Native Title determination of 2017 is an agreement between those representing the Mirning Traditional Aboriginal Lands Corporation, (MTLAC), and CC Cooper of Madura Station, Roderick Campbell of Kybo Station, Bree and Colin Campbell of Mundrabilla Station, and the state of WA.

The Mirning Traditional Lands Aboriginal Corporation, set up a wholly owned subsidiary, Mirning Green Energy and it is this company that is part of the Western Green Energy Hub (WGEH), in that it has a permanent seat on the WGEH board. The appointment of a member of a Native Title group to a company board represents a major change from the usual six month in-good-faith consultation processes currently undertaken by companies in WA in their negotiations with Native title holders. Giving native title holders an active decision-making role, not simply consultation, in theory can result in better outcomes for all concerned.

There are six pastoral leases involved in the industrialization of the Nullarbor. This involvement comes via changes to lease arrangements due to the

new Diversification Lease tenure process or via big investors buying into these pastoral leases or via Mirning native title arrangements. The stations involved are:

- Mundrabilla Station
- Madura Station
- Nurina Station
- Moonera
- Arribiddy Station
- Rawlinna Station

Madura Station is owned by the South Australian company Coopers Ltd. Rawlinna Station although owned by the MacLachlan Family (Jumbuck Pastoral), has investment coming from Fortescue Metals, with

BHP prospecting for Nickel in February of 2023.⁴ Mundrabilla, Madura and Moonera Stations will be directly affected by the proposal as WGEH has over the past two years been negotiating permissions with both the station owners and Mirning Green Energy.

International financial interests in the development currently include, InterContinental Energy (ICE), CWP Global, now CWP Renewables, owned by Andrew Forrest's company, Squadron⁵, and the Korea Electric Power Corporation (KEPCO)⁶. InterContinental Energy is backed by the Singapore government's investment fund, and the Saudis. Recently, Shell and BP have also taken interests in ICE's solar and hydrogen developments in both Oman and the Australian Renewable Energy Hub in the Pilbara.⁷ Andrew Forrest purchased Rawlinna

⁴ Lucas. J., *Andrew Forrest's Fortescue Metals Group set to buy Australia's biggest sheep station at Rawlinna, WA*. <https://www.abc.net.au/news/2023-04-28/andrew-forrest-set-to-buy-australia-biggest-sheep-station-wa/102279038>

⁵ CWP Global became CWP Renewables after it was purchased by Twiggy Forrest's company Squadron for \$4 Billion late 2022. Australian Financial Review. Dec. 7th, 2022.

⁶ Western Green Energy Hub and Korea Electric Power Corporation sign MOU towards a Joint Development Agreement for the production of green hydrogen in Australia. Western Green Energy Hub, Media Release: 11 July 2023.

⁷ Parkinson. G., 'Big Oil snaps up lead role in another massive 25GW green hydrogen project'. 19 January 2023. <https://reneweconomy.com.au/big-oil-snaps-up-lead-role-in-another-massive-25gw-green-hydrogen-project>. Accessed 20 July, 2023 3pm. For https://www.bp.com/en_au/australia/home/who-we-are/reimagining-energy/decarbonizing-australias-energy-system/renewable-energy-hub-in-australia.html

Station earlier this year, for his use in solar generation.⁸

Finally, the West Australian government has a stake in this development as it wants to take advantage of the boom in energy markets.

What is Planned?

- Between 3 - 4,000 windmills, spaced 2 - 4km apart
- Blade length each of 50m
- Turbine hub height 150m to 170m
- Turbine heights will be 200-220m: top of blade to ground
- 20 *million* solar panels placed in
- 50 solar farms with a hydrogen hall sited in each one
- Cabling to carry the compressed hydrogen to the ammonia plant. This cabling will be buried.
- All electrical transmission lines, from the solar farms and turbines will be above ground
- Substations and transformers will also be needed
- Blades, towers, will be manufactured at Eucla and Madura
- Access roads to turbines and solar farms will be constructed
- Two village and industrial clusters are proposed, at Eucla and Madura, with access to the Hampton Plateau coming from the Eyre Highway
- Eucla will host a marine facility, as ammonia will be pumped from the processing plant near Weebubbie, down the escarpment to shipping facilities (Figure 2)
- These facilities will include loading and offloading abilities of the materials used during construction and maintenance phases
- The ammonia is to be shipped overseas to Singapore and South Korea

⁸ Sarah Thompson, Kanika Sood & Emma Rapaport. 'Fortescue set to acquire MacLachlan's Rawlinna Station' *Australian Financial Review*. April 27, 2023. See: <https://www.afr.com/street-talk/fortescue-set-to-acquire-maclachlan-s-rawlinna-station-20230427-p5d3sk>

See also: <https://www.abc.net.au/news/2023-04-28/andrew-forrest-set-to-buy-australia-biggest-sheep-station-wa/102279038>

- A desalination plant will be built on the coast near Eucla to provide water for all the 50

hydrogen halls on the plateau. Water piping will be above ground.



Figure 2: Route of the piping for the ammonia to reach the shipping facilities. Map: Robert Kershaw, prepared for the Conservation Commission, based on information supplied by Western Green Energy Hub, November 2022.

Financially, returns to landowners from wind turbines can represent a lucrative income stream. Payments are determined by the area of land utilised which includes, not only the individual turbine footprint, but all access roads, transmission line easements, substations, transformers, the generating capacity of the turbine, etc.⁹ Currently, the going return from wind turbine farms seems to range from \$15,000-

\$30,000 per turbine for the life of the turbine, but exact returns vary¹⁰.

The Conservation Commission's Engagement with the Western Green Energy Hub.

Ian Collette, President of the Western Australian Speleological Group (WASG), organised a meeting between a group of WASG members and WGEH CEO around August 2022, and suggested that The Commission follow up. Thus, in November 2022 WGEH met, via Zoom, with about 30 members of The Commission. This two-hour session was very instructive in that it laid out a great deal of what is planned for the Nullarbor. After this meeting WGEH

⁹ Australian Energy Infrastructure Commissioner is a federal government agency established to provide the community with information concerning wind farms, solar farms and associated infrastructure. See: <https://www.aeic.gov.au/observations-and-recommendations/chapter-1-host-landowner-negotiations>

¹⁰ Jane Norman and Nathan Morris. 'Australians are Cashing in on Rapid Wind Farm Expansion, but it's Tearing Some Towns Apart'. Australian Broadcasting Commission. *Landline*. Posted 14 April, 2023. <https://www.abc.net.au/news/2023-04-14/expansion-of-wind-farms-likened-to-coal-seam-gas-clashes/102208318>. Accessed 22.7.2023.

wanted the ASF to sign a confidentiality agreement, which would have bound it to silence and not be able to publicly comment on the development. This, as the Chair of the Conservation Commission I refused to do, as I do not believe that independent organisations such as the ASF or its members should be muzzled by such arrangements. WGEH finally released the recording of the Zoom meeting, two months after it occurred. This recording is now held in the ASF library.

It was clear from the Zoom meeting with WGEH that they have undertaken, and are continuing to undertake, major surveys of heritage, both Aboriginal and European, flora and fauna but have little idea about the caves or the geomorphology of the Nullarbor. The methods they intend to use to find caves include Ground Penetrating Radar, drones, and desk top studies. Their examination of the caves was related to risk, biodiversity and cultural values. It was also obvious from the meeting, that WGEH will not share any cave or karst feature locational details they find, with the ASF.

The timeline by WGEH for the project is to have the Indigenous Land Use Agreement (ILUA) signed by mid-2023, and to have all the background EIS studies completed by the end 2023, so as to place the documentation before the WA Environmental Protection Authority (EPA) by early 2024. The year to finalise financial commitments to build the project is 2027.

The Role and Work of the Conservation Commission.

The Conservation Commission has had wide-ranging discussions with members of the Australasian Cave and Karst Management Association (ACKMA), Cave Diving Association of Australia (CDAA) and the ASF on strategies, data use, listing the Nullarbor as a National and World Heritage site and generally gathering background material for a campaign. It has engaged with the owners of Mundrabilla Station and values the many contributions from cavers all around the country.

In February of this year, myself, Sue and Nick White met with the Conservation Council of Western Australia (CCWA) for a lengthy discussion on the issue. Once again, this meeting was to establish the issue on Council's radar and for them to get to know something about caver involvement on the Nullarbor.

Contact has been made with Federal Government ministers, via submissions to the Minister for the Environment, Tanya Plibersek, Minister for Climate Change and Energy, Chris Bowen and the Prime

Minister, Anthony Albanese. These submissions are part of a strategy to put the issue before them.

Media

The Kalgoorlie Miner, the local Kalgoorlie newspaper, ran a few articles on the Nullarbor development in September 2022 mainly outlining the impact on the local council's resources, and explaining what the development would entail. Consequently, members of the Commission wrote letters to its editor. This sparked the editor's interest and Ann-Marie Meredith from the WASG followed up directly with him, resulting in a three-page spread with high quality cave photographs from Allan Pryke, being published in October 2022.¹¹ Channel Seven picked the issue up but did not publish, despite numerous cavers providing drone footage to the journalist involved and channel 7 filming Ian Eddison, representing the speleological community. In the meantime, The Commission regularly publishes articles in Caves Australia and runs national, cross organisational, CDAA, ACKMA Zoom sessions.

How Can You help?

Currently, The Commission is working behind the scenes to shore up data accuracy, secure our interests in any negotiations via legally binding MOUs and other types of legal agreements. A film is being prepared by a small group within The Commission and has funding which has been donated by Andy Spate and members of the Hills Speleological Society. However more funds are needed.

Members of ACKMA can help by talking to all those you know about this issue. Make use of your local and international caving links to inform them of the issues involved and that we need help to stop this.

Write a letter to, and meet with, your local Federal Member of Parliament. The more politicians at both Federal and State levels who have met a person from their constituency with concerns about this issue, the more informed they will be. Thus, when the WGEH proposal reaches the State and Federal environmental

¹¹ Madeleine Clark. 'Energy Plan Threat to Fragile Caves'. *Kalgoorlie Miner*. Saturday Oct. 29, 2022. See: <https://www.kalminer.com.au/news/kalgoorlie-miner/concerns-for-future-of-globally-unique-nullarbor-cave-system-if-massive-green-hydrogen-project-goes-ahead-c-8679446>

assessment stages, we can use the contacts we have made, to help us put a stop to this development.

The approach in dealing with this issue is to provide evidence about the natural values of the Nullarbor karst and promote that view. It is important to convince people that the Nullarbor is of great importance to us all and that such developments are not warranted. Further, attention needs to be paid to the politics of renewable energy within the context of the Australian government's commitments in meeting its international climate targets. For example, the Minister for Climate and Energy, Minister Bowen, stated 'that if Australia is going to meet its 2030 targets, then we will need, amongst other energy sources, to install 63 million solar panels'¹². Given that the WGEH is going to install 20 million of them, governments of all jurisdictions would no doubt be welcoming such a development.

Funding: send donations to the Karst Conservation Fund, which is setting up a project to get a short film made and get the National Heritage nomination completed within the next six months. The latter we expect to cost \$30,000 by the time we employ some people to do it.

If Cavers and our supporters are to stop this inappropriate development, we must use every avenue to educate, to lobby and to garner support. If we fail, then the Nullarbor, and its caves will be lost forever. We must work together. We must not fail.

¹² Hewett, J., 'Everybody likes renewable energy, but not in their backyard'. Financial Review. Nov 22, 2022. Published on line 4.20pm. Accessed July 25, 2023. 5pm
<https://www.afr.com/companies/infrastructure/australia-must-build-22-000-solar-panels-a-day-for-eight-years-20221122-p5c08m>