

Discuss the proposals for dumping and storage of Australian and/or international nuclear waste in so called 'remote' areas of Australia, most of which are in Western Australia or South Australia.

Proposals for the dumping and storage of nuclear waste in Australia have been on the political agenda since the late 1970's. Australia is considered to have the most secure geological land mass with 'remote' areas that would be ideal to solve the world-wide problem of nuclear waste. According to scientists there is no other region in the world more suitable. But these so called 'remote' areas are home to the indigenous people who have protested the use of their land in a harmful way. Even before Australia was settled, Aboriginals gave warnings to their people about the sickness uranium could cause when coming in contact with it.

The new Australians first began using products derived from uranium such as X-rays and radioactivity for clinical purposes in Melbourne, Victoria in 1903. Soap and water products made from radium were promoted and used as remedies for a wide range of medical conditions.¹ The uses of radium spread in the form of luminous paint which was applied to watches and clocks, scientific instruments, and dials on instrument panels up until the 1960's. Even shoe shops in Australia in the 1950's commonly confirmed the fit of shoes on children with equipment that used x-rays to show the images of the feet in shoes.²

While the new Australians seem to embrace the harmful products manufactured from uranium, this is in stark contrast to the concerns that Aboriginals have as expressed in their Dreaming stories and their messages that have been passed down through the generations. Even today the Aboriginal Elders give strong messages of "NO" to the mining of uranium and the dumping of waste products in so-called remote areas of Australia. In

¹ *Radioactive waste and spent nuclear fuel management in Australia*, Politics and Public Administration Group, Parliamentary Library of Australia, 1 January 2006. Online at: <http://www.aph.gov.au/library/pubs/online/RadioactiveWaste.htm> Accessed 6 October 2007

² *Radioactive waste and spent nuclear fuel management in Australia*, Politics and Public Administration Group.

fact most of these areas are known as Vacant Crown Land with little or no references made to the original Indigenous people and their concerns for the land. (See Attachment 1: Map of Regional Location IWDF, Western Australia)³

Radioactive waste and the management of it in a national repository have been on the political agenda between the Commonwealth and State governments since 1979.⁴ Site selection for a shallow burial of low level radioactive waste began in 1985. It was argued that medical and research institutions such as hospitals and universities shouldn't be burdened with the storage of these wastes. A national dump would provide a site for the disposal of large quantities of contaminated soils from uranium mill tailings and it could also be used to accept intermediate and high-level wastes such as spent fuel rods from the Lucas Heights nuclear reactor. The Australian Government estimates that Australia has about 3,500 m³ of low level and short-lived intermediate level radioactive waste. It considers it suitable for disposal in a near-surface repository.⁵ Proponents for a national waste dump for global use claim that Australia is the ideal location for the following reasons:

- Australia has very large remote regions;
- the ancient stable continent of Australia is ideally suited for safe deep-geological disposal of high-level radioactive waste or spent nuclear fuel;
- there is no other region in the world more suitable from a scientific point of view;

³ Map reference: Dames & Moore, Alan Tingay + Assoc, *Intractable Waste Disposal Facility (IWDF)*, located at Mt Walton East, Western Australia, Waste Management WA – Department of Environmental Protection, Page 29. Online at: http://www.epa.wa.gov.au/docs/967_B1005.pdf Accessed 6 October 2007

⁴ Daniel Voronoff, *Australia's Proposed Radioactive Waste Dump in SA*, The Sustainable Energy and Anti-Uranium Service Inc (SEA-US), February 1999. Online at: <http://www.sea-us.org.au/wastedump/feb99update.html> Accessed 30 September 2007

⁵ *Radioactive Waste Management*, Radiation Protection, Australian Government Australian Radiation Protection and Nuclear Safety Agency, 6 October 2006. Online at: http://www.arpsa.gov.au/radiationprotection/FactSheets/is_waste.cfm Accessed 30 September 2007

- Australia would show leadership by contributing to world environmental safety and security; and
- it would be a high tech industry bringing significant economic benefits with hundreds of billions in revenues over decades with thousands of jobs created.⁶

These claims on waste disposal are at odds with the “out of sight, out of mind” that Indigenous people caution, yet the Federal Government appears to embrace.

On 18 February 1998, the Minister for Resources and Energy announced that a 67,000 square kilometre region in South Australia was identified as the most suitable area for a waste disposal site. The area called Billa Kalina after one of the ecologically unique mound springs located in the Lake Eyre South region extends over the traditional country of the Kokotha people to the south and the Arabunna people to the north⁷. This announcement did not go unnoticed by the indigenous people living in this so-called remote area.

“We say NO radioactive dump in our ngura – in our country.” This statement was made by the Kupa Piti Kungka Tjuta, the senior Aboriginal women of South Australia.⁸ In 1998, eight senior Aboriginal women began their “talking straight out against the poison” campaign to Government representatives, the media and political parties. Their key messages were to educate them about the area including the Dreaming present in Cooper

⁶ Dr Charles McCombie, Baden Switzerland & Dr Marcis Kurzeme, Melbourne, Australia, *Managing Australian radioactive wastes: scientific truths, political posturing and missed opportunities*, Australian Uranium Association, 16 November 2005. Online at: <http://www.uic.com.au/McCombie&Kurzeme.pdf> Accessed: 30 September 2007

⁷ Daniel Voronoff, *Australia's Proposed Radioactive Waste Dump in SA*, The Sustainable Energy and Anti-Uranium Service Inc (SEA-US), February 1999. Online at: <http://www.sea-us.org.au/wastedump/feb99update.html> Accessed 30 September 2007

⁸ The Senior Aboriginal Women of Cooper Pedy, South Australian, *Irati Wanti, the poison – leave it*, The Kupa Piti Kungka Tjuta, Online at: <http://www.iratiwanti.org/iratiwanti.php3?page=kungkas> Accessed 30 September 2007

Pedy and effects on the land and underground water.⁹ Their messages informed readers of the concerns they had about artesian bores for drinking water, and of the long and dangerous distances the poison would travel to arrive at the site planned for storing nuclear waste. A truck carrying the poison might have an accident and kill all that surrounds it.¹⁰ These concerns of the indigenous people and the South Australian Government were heeded when the ambition to use the site as a waste dump was spectacularly overturned by the Federal Court in 2004.¹¹

Nuclear Waste dumps are not only a concern for Australia. In the United States, the Government has had an 18 year battle to store 77,000 tonnes of highly radioactive nuclear waste dump inside Yucca Mountain in the Nevada desert.¹² The Nevada State Government has challenged the plan uncovering a real danger of spontaneous nuclear chain reactions. Accusations have been made about doctored statistics and there has been fierce debate about how many thousands of years the material will remain dangerous. The prospects of an accident involving giant trucks full of radioactive waste, winding their way through major cities, has unnerved many Americans. It has been a public relations nightmare. None of the nuclear waste is generated in Nevada and the State feels singled out because of its scattered population of 2 million people.¹³

⁹ Eileen Unkari Crombie, Peggy Tjingila, Ivy Makinti Stewart, Eileen Wani Wingfield, Eileen Kampakuta Brown, Angelina Wonga, Emily Munyungka Austin, Betty Nyimpula Muffler, *First Call out to the Greenies*, Letter to the Greenies, The Kupa Piti Kungka Tjuta, 3 August 1998. Online at: <http://www.iratiwanti.org/iratiwanti.php3?page=kungkas> Accessed 30 September 2007

¹⁰ Eileen Unkari Crombie, Executive Council, *Letter to the Adelaide Advertiser*, The Kupa Piti Kungka Tjuta, 23 November 1999. On line at <http://www.iratiwanti.org/iratiwanti.php3?page=kungkas> Accessed 30 September 2007

¹¹ Fairfax Digital, *Desert Wasteland*, The Sydney Morning Herald, National, 22 October 2005. Online at: <http://www.smh.com.au/news/national/desert-wasteland/2005/10/21/1129775959997.html> Accessed 30 September 2007

¹² Fairfax Digital, *Desert Wasteland*, The Sydney Morning Herald

¹³ Fairfax Digital, *Desert Wasteland*, The Sydney Morning Herald.

Back in Australia, Aboriginal communities are facing ongoing dispossession and marginalisation. They are seeking to inspire the wider Australian community to take action and scrutinise the way that companies and government agencies interact with the Aboriginal community in negotiating 'consent' to expand the nuclear industry. Aboriginal people have declared that they hold the key to survival on this land. 'We are the authority of this country..... and we call on all peoples to take notice of what we are saying. The Old Country is angry. It is talking, Be aware!' It has seen the people come and go. 'We say "No, No, No, No, No to the Roxby Downs mine and the radioactive waste dump.'¹⁴ Many Indigenous ancestral creation-dreaming stories talk of 'sickness country' in areas with high uranium deposits. The Adnyamathanha people of the rocky country in northern Flinders Ranges in South Australia tell a story of rancid yellow Emu vomit in particular areas of their country. These areas were to be avoided whenever possible and people are to 'lay low' when the east wind was blowing. Extraction of this yellow-green poison is highly risky to the people and cautionary messages have been passed on for generations.¹⁵ Uranium deposits located in 'sickness country' is a cultural burden for Aboriginal people and the sickness can manifest itself in the health and well being of each Indigenous person.

Compared to the long history that Aboriginal people have had exposed to uranium, the new Australians only first 'discovered' it in the 1890's. Mining concerns seeking to exploit lucrative uranium deposits on Aboriginal land have failed to show similar respect to the toxic nature of the ore. In the 1950's the Government and much of the Australian public regarded the desert as barren wasteland, a desolate empty place, adequate for weapons

¹⁴ Alex Kelly and Carla Deane, *Green & Black, Alex Kelly and Carla Deane find Aboriginal Australians 'talking up strong' against the nuclear industry*, New Internationalist, September 2005. Online at: http://newint.org/features/2005/09/01/green_and_black/ Accessed 30 September 2007

¹⁵ Alex Kelly and Carla Deane, *Green & Black, Alex Kelly and Carla Deane find Aboriginal Australians 'talking up strong' against the nuclear industry*, New Internationalist.

testing, uranium mining and the dumping of nuclear waste. This is in contrast to the Indigenous people who believe that this country is their home and is alive with stories, culture and life.¹⁶

In Western Australia (WA), on Vacant Crown Land, an Intractable Waste Disposal Facility (IWDF) east of Mt Walton in the Shire of Coolgardie is already in use. Its design is for waste disposal by shaft entombment or trench burial. Transport of the waste comes by road from destinations throughout WA. This waste site goes relatively unnoticed by the broader WA community, and maps showing its location are without reference to the significant Indigenous groups of Wongi, Nyoongar and Yamatji. (See Attachment 2: Learning Guide 1: Map of Noongar country, courtesy of State Art Gallery of Western Australia.)

The Commonwealth Government has a Code of Practice for the near surface disposal of radioactive waste in Australia (1992) which sets out the criteria for site selection.¹⁷ The general site characteristics are desirable to 'a near-surface repository site ideally should be located in an area with favourable meteorological, geological and geographical characteristics so that the radioactive waste, once in place, will be adequately isolated from the biosphere for the time that the radionuclide originally present, or their progeny, constitute a radiation hazard. The Code of Practice also makes specific references to site exclusion where the location is near significant natural resources, valuable mineral deposits and the area has notable ecological significance, rare fauna or flora and special

¹⁶ Alex Kelly and Carla Deane, *Green & Black, Alex Kelly and Carla Deane find Aboriginal Australians 'talking up strong' against the nuclear industry*, New Internationalist.

¹⁷ National Health and Medical Research Council, *Code of practice for the near-surface disposal of radioactive waste in Australia (1992)*, Radiation Health Series No 35, Commonwealth Government of Australia, November 1992. Page 19. Online at: <http://www.arpansa.gov.au/pubs/rhs/rhs35.pdf> Accessed 30 September 2007.

cultural or historical significance.¹⁸ Groundwater and the depth of the water table are specifically mentioned for site selection where it is not suitable for human consumption or agricultural use. Significantly it lacks reference to animals drinking the water and then being consumed by the local Indigenous people living near the site or downstream.

Although Australian desert lands appear to be dry on top, there is a big underground river according to the senior Aboriginal women. Water may leach through the shallow burial nuclear waste dump and poison the water for thousands of years. The animals drink from this water like *malu* kangaroo, *kalaya* emu, goanna and all the others. The Aboriginal people eat these animals and if they are poisoned then our people will be poisoned too.¹⁹ Many other problems arise from remote burial such as transport to and from the site, and most importantly, most nuclear 'experts' are based in the cities. This seriously compromises security and monitoring of the waste dump for radioactivity levels, and the ability to retrieve when leakages occur. Until better scientific research is available on the total elimination of nuclear waste and reduction occurs, the senior Aboriginal women offer the alternative and preferred strategy of an above ground dry storage.²⁰ The advantages of this strategy include:

1. the waste will be dry and away from groundwater;
2. the waste is accessible and it would be possible to repackage it and contain leaks;

¹⁸ National Health and Medical Research Council, *Code of practice for the near-surface disposal of radioactive waste in Australia (1992)*, Radiation Health Series No 35.

¹⁹ *Radioactive waste dump*, Background Brief, Irati Wanti. Online at: http://www.iratiwanti.org/iratiwanti.php3?page=nuclear_dump Accessed 30 September 2007

²⁰ *Radioactive waste dump*, Background Brief, Irati Wanti.

3. reduce risk of transport accidents and contamination by accessing the storage in a local area instead of transportation across the continent;
4. encouraging waste minimisation by onsite storage. 'Out of sight, out of mind' fosters more waste disposal culture amongst producers;
5. it will be closer to the experts who mainly live in large cities; and
6. it can be guarded for many generations as it would be necessary to create a guardianship culture that extends into future generations of Australians.

Since losing a federal plan to build a waste dump in South Australia, the Commonwealth Government has announced in July 2005 that the Northern Territory would provide a new site. It introduced a bill that will override any legislative or legal challenge to the proposal from the Northern Territory Government, indigenous owners or green groups.²¹ The senior Aboriginal women of Kupa Piti Kungka Tjuta have challenged the Government's long term ambitions to have near surface disposal of nuclear waste by calling it 'out of sight, out of mind'.²² They refer to 1995 when the Senate Select Committee on the Dangers of radioactive Waste conducted an inquiry into radioactive materials and waste management. The Committee strongly recommended against 'shallow burial' and supported the construction of a national above ground facility as a centre store for radioactive waste. The nuclear waste site would only have an 'institutional control period' of 100 years, and the engineering integrity would be of 300 years. Some of the low-level waste products last for 1,600 years which is well short of the design and control specifications. Shallow burial does not prevent harmful gases from escaping such as Radon gas which comes from

²¹ Fairfax Digital, *Desert Wasteland*, The Sydney Morning Herald,

²² *Radioactive waste dump*, Background Brief.

decaying products and is known to have the main agents of lung cancer found in uranium miners.

Whilst not an ideal solution, nuclear waste stored above ground is not 'out of sight, out of mind'. The site would be visible with ongoing scrutiny by the public and experts to monitor the progress of the deadly waste. The so-called remote areas of Australia are home to the Indigenous people who have issued warnings about their concerns for the land and future generations. If the Australian Government continues to ignore these warnings, they do at their peril. Just as x-rays were promoted to check children's shoe fittings without health warnings in the 1950's, a similarity exists today with the promotion of uranium mining and waste dumping in Australia. The harmful consequences of nuclear mining and the lifespan of nuclear waste seem to be ignored at the expense of future generations.

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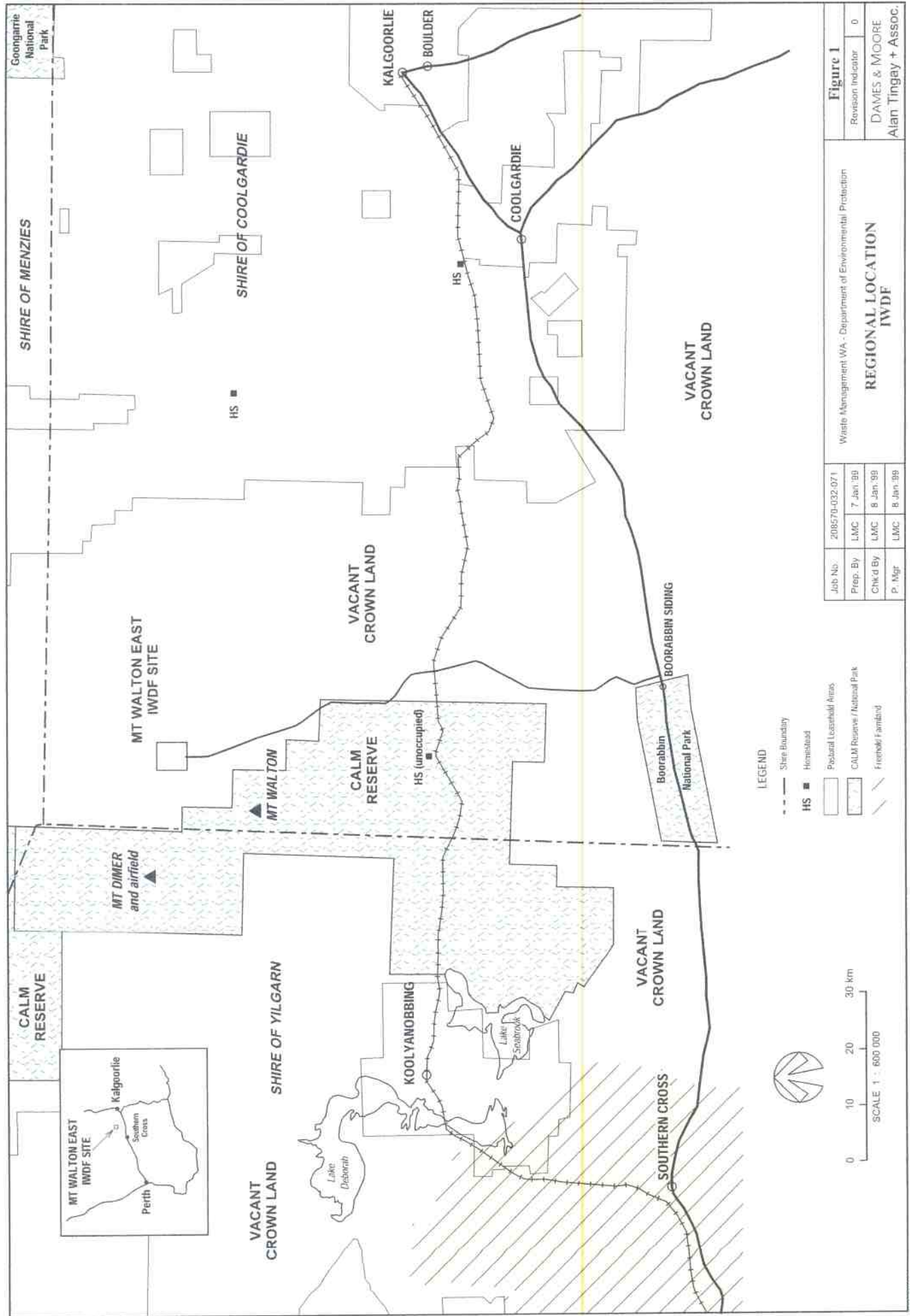
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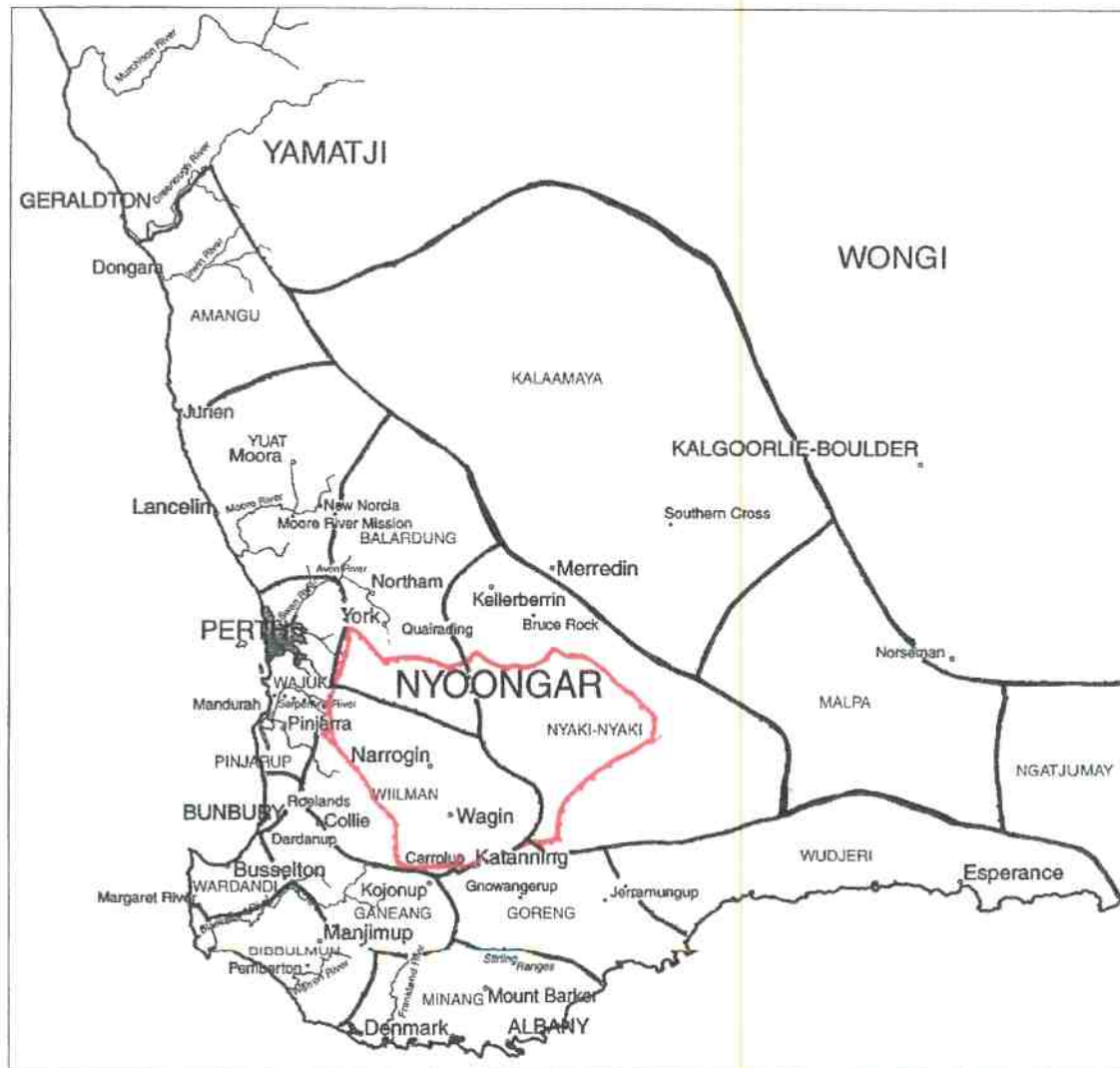


LEARNING GUIDE 1: Map of Noongar country

Instructions:

- Highlight towns in your area – the Narrogin district is circled in red, you may need to go over the line.
- Add other towns that you know, or look up.
- Include your map (or part of it) in your book of towns.

Map of the Nyoongar Area



This map indicates the general location of Nyoongar people. It also indicates the approximate divisions of language groups and other significant Indigenous groups – the Yamatji of mid-western Australia and the Wongi of the Goldfields. The spellings of the groups may alter depending on the source of information.

It should be noted that these boundaries are approximations and are partly based on N.B. Tindale's 'Distribution of Australian Aboriginal tribes: a field survey', 1940. They are not suitable for use in Native Title and other land claims. For more information about the groups of people from a particular region contact the relevant land councils.

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'Map of Noongar country' courtesy State Art Gallery of Western Australia ©