



Gender & Disaster Australia

Wyndham -East Kimberley

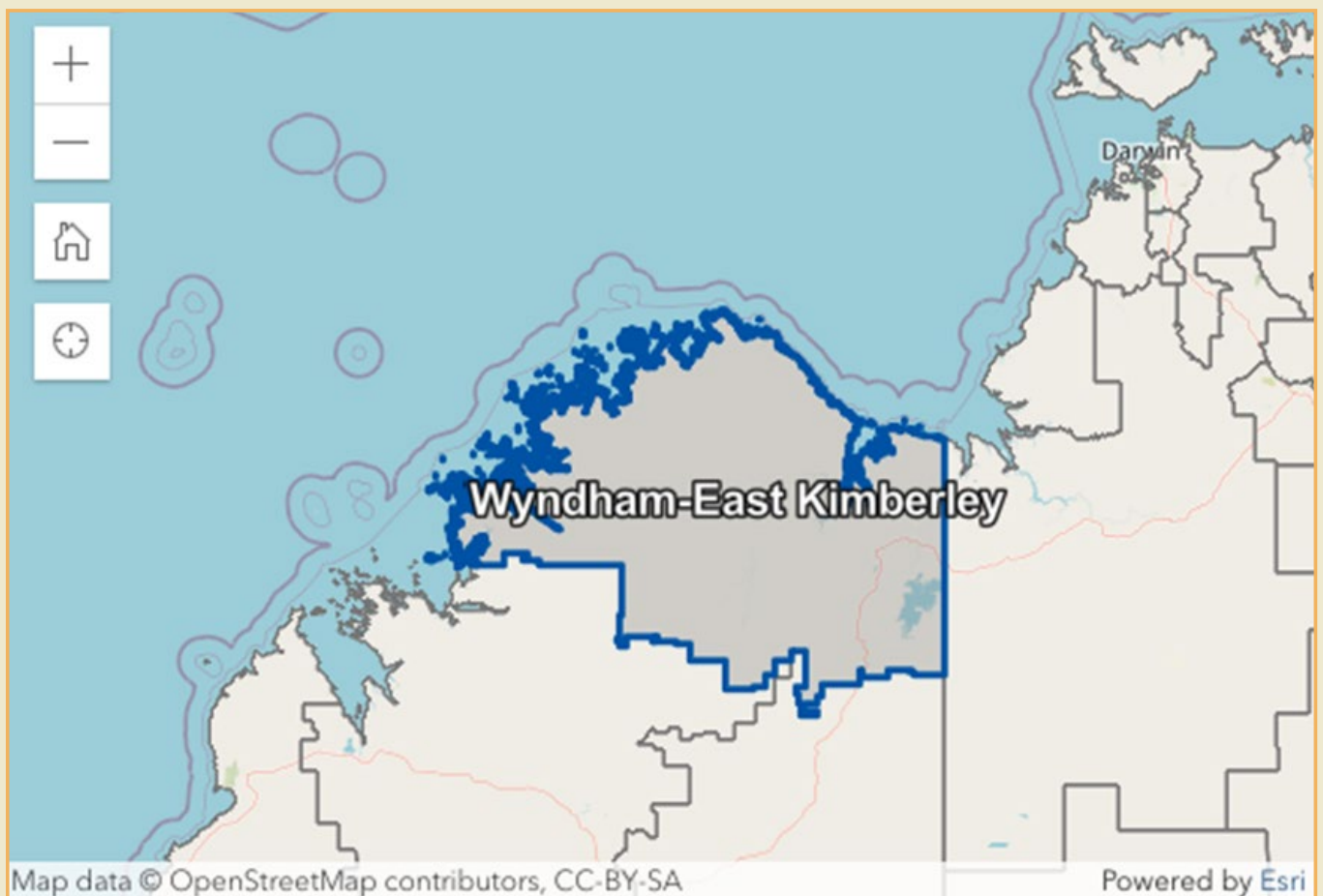
DISASTER CONTEXT

Socio-demographics from
a gendered perspective





Wyndham-East Kimberley



Map of the Wyndham-East Kimberley Local Government Area (LGA).

Source: <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA59340>





INTRODUCTION

The Local Government Area (LGA) of Wyndham-East Kimberley sits in the northeast corner of Western Australia (WA), bordering the Northern Territory (NT) and including the northernmost point in WA. The LGA is sparsely populated but its major towns include Kununurra and Wyndham and there are also around 40 Aboriginal communities in the area, the largest of which is Kalumburu. The topography of the area is rugged, covered in cliffs, gorges, and river plains. It has significant horticulture, agriculture, and aquaculture economies, and its tourism economy is also growing.¹ The climate in Wyndham-East Kimberley is a tropical monsoon climate defined by distinct wet and dry seasons. In the dry season, weather is stable, with clear blue skies and cooler temperatures. The wet season is unpredictable, hot and humid, and susceptible to violent thunderstorms. During the wet season, cyclones and flooding pose disaster risks to the area, while during the dry season the primary concern is bushfires.²

Over the last two wet seasons, Wyndham-East Kimberley has suffered successive tropical cyclones. In February 2022, tropical cyclone Anika made landfall in the LGA, damaging a main road to such an extent that Kalumburu became accessible only by air.³ In late December 2022, tropical cyclone Ellie also passed over the Kimberley region, causing multiple days of heavy rainfall and serious flooding; the Fitzroy River reached its highest levels on record in early January.⁴ Although tropical cyclone Ellie did not

itself cross over Wyndham-East Kimberley, in the weeks that followed the impact of the cyclone caused more heavy rainfall and a 'once-in-a-century' flooding event across the area.⁵

Academic studies of cyclonic activity in the Kimberley region rarely consider social impacts, but some recent research has investigated the connections between climate change, cyclones, and Aboriginal and Torres Strait Islander cultural knowledge in the area. For example, it has become clear that extreme weather events such as more intense cyclones and associated flooding could increase in the monsoonal region of the Kimberleys as a result of climate change.⁶ The absence of studies of how Aboriginal and Torres Strait Islander people experience climate events like tropical cyclones represents a significant knowledge gap, which presents a major barrier to the development of adaptation plans and policies given that we know traditional knowledge has an important role to play in climate change adaptation.⁷ For example, Scherrer & Doohan (2011) documented reports from traditional owners in the Kimberley region that unsanctioned increases to tourist activity in the area had led to changes to local climate patterns including "bad" cyclones.⁸ Leonard et al. (2013) found that many aspects of Indigenous climate change adaptation in the Kimberley promoted adaptive capacity and community resilience, including their knowledge of the environment and historical experiences of climate extremes and change.⁹

1 <https://www.swek.wa.gov.au/about/about.aspx>

2 Shire of Wyndham East Kimberley. Kununurra - Wyndham Local Emergency Management Arrangements, 2022-2027. Available at: https://www.swek.wa.gov.au/Profiles/swek/Assets/ClientData/SWEK_LEMA_2022.pdf

3 <https://nema.gov.au/Tropical-Cyclone-Anika-Assistance>

4 <http://www.bom.gov.au/cyclone/history/Ellie-2022.shtml>

5 <https://nema.gov.au/about-us/media-centre/Kimberley-Floods-090123>

6 Leonard, S., Mackenzie, J., Kofod, F., Parsons, M., Langton, M., Russ, P., & Ormond-Parker, L. (2013). *Indigenous climate change adaptation in the Kimberley region of North-western Australia*. National Climate Change Adaptation Research Facility & The University of Melbourne.

7 Ibid., see also Leonard, S., Parsons, M., Olawsky, K., & Kofod, F. (2013). The role of culture and traditional knowledge in climate change adaptation: Insights from East Kimberley, Australia. *Global Environmental Change*, 23(3), 623-632.

8 Scherrer, P., & Doohan, K. (2011). Capturing intangible cultural impacts of tourism on Aboriginal land in Australia's Kimberley region. *Tourism Recreation Research*, 36(3), 271-280.

9 Leonard, S., Mackenzie, J., Kofod, F., Parsons, M., Langton, M., Russ, P., & Ormond-Parker, L. (2013). *Indigenous climate change adaptation in the Kimberley region of North-western Australia*. National Climate Change Adaptation Research Facility & The University of Melbourne.



DISASTER BACKGROUND

Kind of disasters affecting this region/town: Cyclone, flooding, bushfire

Event name	Hazard type(s)
Kimberley floods, Jan- May 2023	Flooding
Tropical cyclone Ellie, Dec/Jan 2022/3 ¹⁰	Cyclone
Tropical cyclone Anika, Feb/March 2022 ¹¹	Cyclone

Recent major disaster: Tropical cyclone Ellie and subsequent Kimberley floods

- Fatalities: 0
- People displaced:
 - More than 200 people were evacuated across the Kimberley region; by 1 April 2023, approximately 150 had returned¹²
 - In Wyndham-East Kimberley, 3 boaters who ran out of fuel in challenging post-flood waters and 2 hikers stranded by flood waters were rescued in the aftermath of the cyclone¹³
- Properties and infrastructure affected:
 - The Great Northern Highway Bridge, usually relied on as the only all-weather road connection between the west and east Kimberley, was destroyed; it is estimated that it will take 1-2 years to replace the bridge¹⁴
 - The Victoria Highway also closed at Bulla. With both highways closed, Wyndham-East Kimberley became cut off from the supply of essential goods. This caused significant food shortages in Kununurra and surrounding areas¹⁵ and led to calls for the WA government to expand freight subsidies to include more than just the essentials as transport costs skyrocketed¹⁶
 - Around 120 public housing units were damaged in the flood, including 20 that were completely destroyed, leaving 88 people homeless in temporary and portable accommodation¹⁷
 - Tens of thousands of cattle were believed to have been lost¹⁸

¹⁰ <http://www.bom.gov.au/cyclone/history/Ellie-2022.shtml>

¹¹ <http://www.bom.gov.au/cyclone/history/anika22.shtml>

¹² <https://www.mbtimes.com.au/news/kimberley-floods-three-months-since-one-in-100-year-disaster-c-10222739>

¹³ <https://www.abc.net.au/news/2023-02-27/three-search-and-rescue-efforts-in-kimberley-wa/102026864>

¹⁴ <http://www.bom.gov.au/cyclone/history/Ellie-2022.shtml>

¹⁵ <https://www.abc.net.au/news/2023-02-28/flooding-east-kimberley-road-closures-disrupts-supply-chains/102033524>

¹⁶ <https://www.abc.net.au/news/2023-02-03/kimberley-producers-call-for-government-support-on-freight/101915822>

¹⁷ <https://thewest.com.au/stories/staggering-four-year-wait-for-public-housing-after-floods/>

¹⁸ <https://www.abc.net.au/news/2023-02-12/kimberley-flood-damage-reveals-long-road-to-recovery/101959524>



- Insurance statistics:
 - o Premier Mark McGowarn told an estimates hearing that the repair bill for the disaster was \$322 million, although he was not able to confirm if that included the Great Northern Highway Bridge demolition and rebuild¹⁹
- Other notable facts:
 - o WA's Premier Mark McGowan described the floods as "the worst WA has ever seen"²⁰

ECONOMIC DISADVANTAGE

- Wyndham-East Kimberley LGA is ranked:²¹
 - o 93 out of 544 LGAs in Australia (where 1 is least advantaged)
 - o in the 2nd decile (out of 10, where 1 is least advantaged)
 - o In the 18th percentile (out of 100, where 1 is least advantaged)

HOUSING AFFORDABILITY AND HOMELESSNESS

- Housing affordability in Wyndham-East Kimberley:
 - o According to the Rental Affordability Index, for households on the median income in Wyndham-East Kimberley (approx. \$95,000), rental affordability in postcode 6743 is deemed 'Moderately unaffordable'. Data is not available for postcode 6740, the other postcode in the LGA.²²

	Wyndham-East Kimberley LGA ²³	Western Australia	Australia
Median mortgage repayments	\$2000/mth	\$1842/mth	\$1863/mth
Mortgage stress ²⁴	11.2%	13%	14.5%
Median rent payments	\$230/wk	\$340/wk	\$375/wk
Rental stress ²⁵	13.2%	28.3%	32.2%

- Homelessness²⁶
 - o In 2021-22, 560 people accessed Specialist Homelessness Services in the LGA of Wyndham-East Kimberley, equating to 7.5% of the population, or 749 per 10,000
 - o 174 of these were men (470 per 10,000) and 386 were women (1022.5 per 10,000)

¹⁹ <https://thewest.com.au/stories/staggering-four-year-wait-for-public-housing-after-floods/>
²⁰ <https://www.theguardian.com/australia-news/2023/jan/09/kimberley-communities-eligible-for-financial-relief-after-unprecedented-flooding>

²¹ This ranking comes from the ABS Local Government Area Indexes, available here: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0012016?OpenDocument>

²² <https://sgsep.com.au/projects/rental-affordability-index>

²³ <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA59340>

²⁴ Refers to the percentage of households with mortgage repayments exceeding 30% of household income

²⁵ Refers to the percentage of households with rental payments exceeding 30% of household income

²⁶ Data cube: SHSC geographical location of client—LGA. Available here: <https://www.aihw.gov.au/reports/homelessness-services/shsc-data-cubes/contents/specialist-homelessness-services-collection-shsc-data-cubes>





MENTAL HEALTH

- Mental health conditions (any): Wyndham-East Kimberley LGA: 3.9% | WA: 8.3% | Aus: 8.8%²⁷
- Suicide rates in Statistical Area 3 (SA3) Kimberley and Statistical Area 4 (SA4) Western Australia - Outback (North), in which the Wyndham-East Kimberley LGA sits (2017-2021):²⁸

Area	SA3 Kimberley	SA4 Western Australia - Outback (North)	WA	Australia
Age-standardised suicide rate per 100,000 population	31.9	24.1	14.9	12.6
Rate for males	n/a	34.8	22.2	19.2
Rate for females	n/a	12.8	7.6	6.1

GENDER EQUALITY

- Lone parent status
 - 22.5% one-parent families (WA: 15.1%), of which 80.7% are female-led (WA: 79.9)²⁹
- Mothers' Index³⁰
 - Wyndham-East Kimberley LGA ranked 112 out of 137 LGAs, where 1 is the best place in Western Australia for a mother to live
- Unpaid work³¹
 - Unpaid domestic work: 1,421 women did more than 5 hours of unpaid domestic work per week, compared to 953 men
 - Unpaid care: 270 women provided unpaid assistance to a person with a disability, health condition, or due to old age, compared to 151 men
 - Unpaid childcare: 921 women provided unpaid childcare, compared to 644 men
- Violence against women (available by suburb):³²
 - Kununurra (population 5494): 56 sexual offences, 824 assault (family) offences, 145 threatening behaviour (family) offences, and 322 breach of violence restraint order offences recorded in 2021-22
 - Wyndham (population 745): 15 sexual offences, 64 assault (family) offences, 6 threatening behaviour (family) offences, and 27 breach of violence restraint order offences recorded in 2021-22

²⁷ <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA59340>

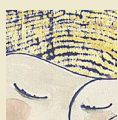
²⁸ All suicide rate stats come from Data table: 2021 National Mortality Database - Suicide, Table NMD S10 and S11, available at: <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/data-downloads>

²⁹ <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA59340>

³⁰ The Mothers' Index consists of composite scores from five different indicators relating to maternal wellbeing (maternal health, children's wellbeing, educational status, economic status and socio-economic disadvantage), with each indicator given equal weighting. Scores were sorted from low to high and ranked from 1 to 137 (1 being the best place for a mother to live) to give the overall Mothers Index rank for each LGA in Western Australia. Full table available at <https://apo.org.au/node/63692>, p. 32.

³¹ ABS General Community Profile for LGA Wyndham-East Kimberley, Tables G24-G26, available here: <https://abs.gov.au/census/find-census-data/community-profiles/2021/LGA59340>

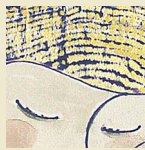
³² <https://www.police.wa.gov.au/crime/crimestatistics#/>

**DEMOGRAPHIC INFORMATION**

	LGA Wyndham -East Kimberley ³³	Western Australia	Australia
Median age	33	38	38
Aboriginal and/or Torres Strait Islander	33.6%	3.3%	3.2%
Both parents born in Australia	58.8%	37.9%	45.9%
Non-English language used in household	16.9%	21.2%	24.8%
With university education	15.8%	23.8%	26.3%
Year 10 as highest qualification	12.1%	11.3%	10.0%
Labour force participation	57.6%	63.9%	61.1%
Working part-time	20%	32%	31.2%
Unemployment	3.7%	5.1%	5.1%
Median weekly personal income	\$1016	\$848	\$805
Median weekly household income	\$1858	\$1815	\$1746
Rate of people on Disability Support Pension per 10,000 population (measured at LGA and state level) ³⁴	408	214	296

³³ <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA59340>

³⁴ <https://data.gov.au/data/dataset/dss-payment-demographic-data>; calculated by dividing number of DSP recipients listed in March 2021 spreadsheet by population of LGA (<https://abs.gov.au/census/find-census-data/quickstats/2021/LGA59340>) and state (<https://abs.gov.au/census/find-census-data/quickstats/2021/5>), and country (<https://abs.gov.au/census/find-census-data/quickstats/2021/AUS>) in 2021, multiplied by 10,000



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