



IVANHOE COMMUNITY WORKING PARTY

IVANHOE HOUSING and ENVIRONMENTAL HEALTH PLAN

February 2021



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GLOSSARY

ACHP	Aboriginal Community Housing Provider
ADHC	Department of Ageing, Disability and Home Care
AHIMS	Aboriginal Heritage Management Information System
AHO	Aboriginal Housing Office
AIHW	Australian Institute of Health and Welfare
APB	Aborigines Protection Board
AWB	Aborigines Welfare Board
CAP	Community Action Plan
CRA	Commonwealth Rent Assistance
CWP	Community Working Party
ERP	Estimated Resident Population
DPIE	NSW Department of Planning, Industry and Environment
FWLHD	Far West Local Health District
HACC	Home and Community Care
HEHP	Housing and Environmental Health Plan
IBA	Indigenous Business Australia
ILALC	Ivanhoe Local Aboriginal Land Council
IRSD	Index of Relative Socioeconomic Disadvantage
LGA	Local Government Area
MPRA	Murdi Paaki Regional Assembly
MPRHBC	Murdi Paaki Regional Housing and Business Consortium
MPRHC	Murdi Paaki Regional Housing Corporation
MPS	Murdi Paaki Services Limited
NGO	Non-Government Organisation
NIAA	National Indigenous Australian Agency
NSHS	National Social Housing Survey
OCHRE	Opportunity, Choice, Healing, Responsibility and Empowerment (NSW Government Aboriginal Affairs Plan)
RAHLA	Regional Aboriginal Housing Leadership Assembly
RDA	Regional Development Australia
REDI.E	Regional Enterprise Development Institute Ltd
RFDS	Royal Flying Doctor Service
SAMP	Strategic Asset Management Plan
SEIFA	Socio-Economic Indexes for Areas



Ivanhoe Community Working Party

IVANHOE HOUSING and ENVIRONMENTAL HEALTH PLAN EXECUTIVE SUMMARY

February 2021

INTRODUCTION

Murdi Paaki Regional Assembly are asking all communities in the Region, through their CWPs, to prepare Housing and Environmental Health Plans (HEHPs) to create the evidence necessary to direct high level policy-setting and decision-making in respect of Aboriginal housing. The Plans set out the needs of the community across all aspects of housing and of related human services.

THE CENSUS

The Australian Bureau of Statistics 2016 Census data for the Ivanhoe community indicated that:

- The population is decreasing over time, with a total of 199 people, including 48 Aboriginal people, but a quarter of households did not respond to the Census;
- The Aboriginal population is ageing;
- There are very few children;
- Closure of the Warakirri Correctional Centre reduced population and removed a major source of employment;
- Post-school qualifications are few;
- Participation in the labour market is weak;
- Ivanhoe experiences a high level of socio-economic disadvantage.

THE MURDI PAAKI HOUSEHOLD SURVEY

The survey, carried out in 2016-17, showed:

- The number of identified properties for rent by Aboriginal households to be 16;
- No Aboriginal household rented privately;
- Five Aboriginal organisations held title to a total of 24 residential lots;

- A general satisfaction with management services through Murdi Paaki Regional Housing Corporation;
- There to be no unmet demand for Aboriginal social housing;
- An underutilisation of properties, a number being lone person households;
- Tenancies to be stable and long-term;
- A need for a repair and maintenance programme to restore property condition.

THE ENVIRONMENT

A look at the environmental factors affecting the community indicated:

- Climate change is leading to a noticeably greater number of days with temperatures over 35°C;
- Airborne pollution, in the form of dust events exceeding the PM10 criterion, is increasing.

THE HEALTH OF THE COMMUNITY

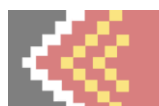
To the extent that the data allows, it appears:

- That the Aboriginal community of Ivanhoe is relatively healthy: there are few childhood illnesses, the adult population is considered to be well, with the expected burden of chronic diseases.

HUMAN SERVICES

An appraisal of human services indicated:

- There to be few human services available to the community and most of those that are are primary health care services;
- Central Darling Shire Council is auspice for the Ivanhoe Multi Service Outlet which



MURDI PAAKI
REGIONAL
ASSEMBLY

- offers a range of community support services: food relief and transport;
- Home care services and home modifications are a high priority for older people and people with a disability. The provider is unable to staff positions and there are currently no services available;
- Youth services are limited and restricted to one evening a week at the youth centre, courtesy of the local police officer.

INFRASTRUCTURE

The community has access to the full range of municipal services except that the town is not sewered. Points of note are:

- Work on a new water treatment plant has commenced;
- Dust created by vehicles travelling on nature strips and back lanes continues to be a nuisance;
- Pedestrian and vehicular access to properties can be hazardous in the wet through water ponding in table drains.

COMMUNITY PRIORITIES

Feedback from the community identified the following priority areas requiring action to bring about improved outcomes:

- Raising housing standards to counter the effects of extreme heat and cold, and declining asset quality;
- Introducing a supervised youth support programme with co-ordinated social and sporting activities, and skills development;
- Greatly reforming, integrating and assuring services, including home modifications, for the frail aged members of the community;
- Making transport arrangements flexible to facilitate easier access to medical appointments;
- Re-introducing employment services;
- Building a multi-purpose cultural centre as an enterprise and social hub.

MASTER PLAN

The HEHP proposes several measures to improve housing, environmental health infrastructure and human services in the community. These may be summarised as:

MASTER PLAN: Proposed actions – Housing and environmental health infrastructure	
Strategy	
Housing repair and maintenance	
A housing repair and maintenance programme is proposed to restore a healthy home environment for tenants and asset condition (Strategies 5.1.1 and 5.1.2)	
Infrastructure	
Request CDSC to extend kerb and guttering to properties in Columbus Street and elsewhere (Strategy 9.4.1)	
Hard-surfaced driveway strips to individual dwellings (Strategy 9.5.1)	
Provide plantings to property boundaries (Strategy 9.5.2)	

The 'probable order of cost' for the above is calculated to be \$1,189,000 (GST inclusive).

MASTER PLAN: Proposed actions – Human services	
Strategy	
Negotiate employment of a Youth Co-ordinator	
Secure reliable, culturally safe packaged aged and disability care	
Advocate to MPRA for introduction of a Regionally based ACCO aged care service	
Invite REDIE to resume delivery of employment and related services in Ivanhoe	
Advocate for resourcing of an Aboriginal Cultural Centre for Ivanhoe	

ACKNOWLEDGEMENT

This Housing and Environmental Health Plan was prepared by the Ivanhoe Community Working Party (CWP) in conjunction with Murdi Paaki Services Ltd. The Ivanhoe CWP would like to acknowledge the contributions of all community members and others who participated in the development of this plan through offering their advice, knowledge and encouragement.

We acknowledge and pay our respects to Elders past and present: those of the Ngiyampaa Nation and those of other Nations who have found their home in Ivanhoe. We also acknowledge and respect the efforts of those community members seeking to improve the wellbeing of all Aboriginal families and individuals living in our community.

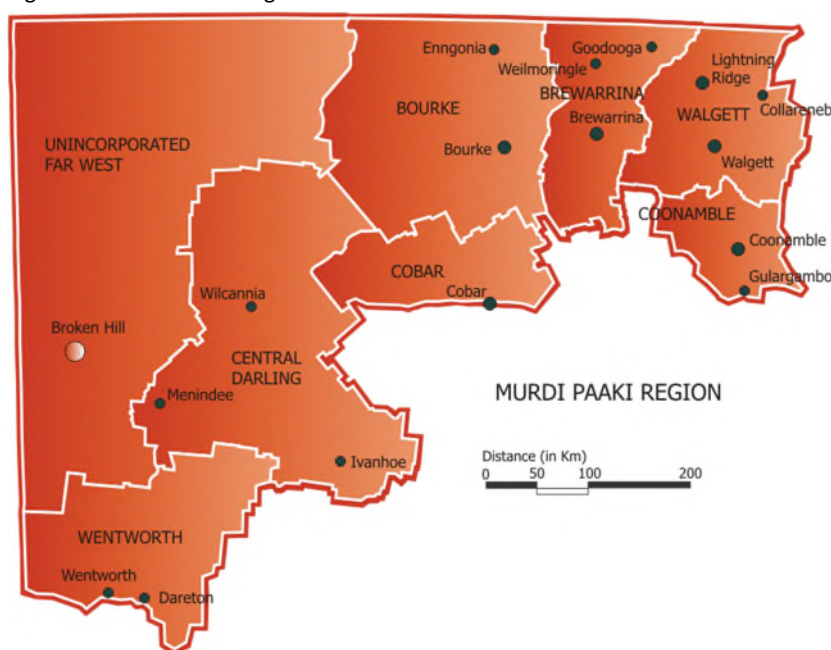
For the purposes of this Plan, an Aboriginal person is a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander person and is accepted as such by the community in which he or she lives.

1 INTRODUCTION

1.1 Purpose of the Plan

This Housing and Environmental Health Plan (HEHP) is prepared for the Aboriginal community of Ivanhoe, in western NSW. The Ivanhoe community is one of sixteen larger communities within the Murdi Paaki Region as shown in Figure 1.1.

Figure 1.1: Murdi Paaki Region



- Consider ways of increasing home ownership;
- To the extent possible, report on the condition of Aboriginal social housing assets;
- Give an assessment of 'wrap-around' human services;
- Determine the need for and form of tenant support and education services;
- Contribute to a review of requirements for financial wellbeing of the Aboriginal social housing sector, including where practical, new forms of investment;

- Provide an informed basis for planning for future housing need and development, and associated value-adding initiatives; and

- Describe a high-level, community-led approach to project master planning to shape the future of Aboriginal housing and related human services in Ivanhoe.

The Plan describes the aspirations of Aboriginal people living in Ivanhoe and outlines a strategic approach to achieving the community's goals.

Planning is the necessary first step in a programme aimed at achieving better housing and environmental health outcomes by building and improving

housing and environmental health infrastructure, together with related services and amenities in the community. The Aboriginal community of Ivanhoe, and particularly existing and prospective tenant households, will benefit directly through having the foundation of a more strategic, informed and innovative approach to resourcing and managing the Aboriginal social housing sector in the community.

1.2 Governance arrangements

HEHPs are an initiative of the Murdi Paaki Regional Aboriginal Housing Leadership Assembly (RAHLA), a partnership of the Murdi Paaki Regional Assembly (MPRA) and the NSW Government created through the OCHRE Local Decision Making

The purpose of the HEHP is to:

- In conjunction with data collected through the Murdi Paaki Regional Housing and Business Consortium (MPRHBC) project and described in the *Social Housing Providers and Assets Audit Report*, establish an evidence-base to guide the way in which housing policy is set and decisions are made in respect of tenancy and asset management and responses to environmental risk;
- Describe the current situation in relation to housing Aboriginal individuals and families in Ivanhoe and, through this, features of tenancies, market conditions, and demand for additional Aboriginal social housing;

policy and directed by the *Agreement to improve Aboriginal social housing outcomes in the Murdi Paaki Region*. The RAHLA sees the preparation of HEHPs in all Murdi Paaki communities as a priority project under the Agreement and has authorised Murdi Paaki Services Ltd (MPS) to carry out the project to begin the process of developing the evidence base for regional policy setting and decision making as a vital step in rebuilding the social housing sector and the social and economic capabilities of the Region.

The Agreement sets a framework for the active participation of Murdi Paaki communities, through elected representative peak bodies, in the development and delivery of better services, and the building of individual and organisational capacity to raise skills, knowledge and competencies. In this regard, the Agreement recognises the status of the Ivanhoe Community Working Party as the principal point of contact for conducting business within the Aboriginal community and for leading the development of the HEHP planning process at community level.

1.3 The bigger picture

This HEHP is intended to supplement the work undertaken to date through the MPRHBC project with more detailed and targeted development options at community level. This work informs local decision-making, prioritisation and accountability on the part of all stakeholders, in the interests of moving to a higher level of sector performance and outcomes.

Plans have been produced to a similar degree of detail for all communities across the Murdi Paaki Region, providing the opportunity for the MPRA to assess communities' strengths and needs both as individual communities and comparatively, in relation to each other. The Plans acknowledge the reality of the experiences of Aboriginal people living in far western NSW and form a resource for intelligent leadership and an integrated, creative response which places communities, to the greatest extent possible, as the principal drivers of sustainable local action.

Put together, it is hoped the HEHPs will:

- Reinststate and strengthen the capacity of Murdi Paaki regional and local Aboriginal Community Housing Providers (ACHPs) to ensure that all Aboriginal people living in Aboriginal social housing in the community are able to receive culturally appropriate, professional and sustainable tenancy and asset management services from ACHPs which themselves are viable and supported;
- Increase access, opportunity and choice in affordable, healthy and safe housing for Aboriginal persons and families living in Murdi Paaki communities through growing the size and mix of the ACHP asset base;
- Work to ensure that assets are maintained in good condition in the long term;
- Ensure that tenants most at risk of a tenancy breach can access the services they need in order to sustain their tenancies;
- Provide greater opportunity for Aboriginal persons and families to engage with employment and education support that enables housing independence;
- If found to be realistic and practical, introduce alternative financial investment models for capital and recurrent costs; and
- Set the foundation for procurement practices and value add initiatives which respond to the 'failed market' environment and benefit the community.

2 BRIEF HISTORY

2.1 Snapshot

Ivanhoe developed at the junction of overland routes from the major centres of rural and mining activity of Wilcannia and Menindee, Cobar, Hillston, Balranald and Hay. Ivanhoe is one of several towns (others are Mildura, Balranald and Menindee) more or less equidistant from Mungo National Park, where archaeological evidence points to a history of Aboriginal ownership and occupation extending back an estimated 45,000 years. The town and the country around it, extending northwards through the Cobar peneplain, belongs to the Ngiyampaa people.

European colonisation commenced in the early 1870s. Over the succeeding 20 years the usual infrastructure (post office, hotels, telegraph station, stores, smithy, school, police station) developed, and Ivanhoe was proclaimed a village in 1890. Construction of the railway reached Ivanhoe in 1925 and, two years later, it was possible to travel from Sydney to Broken Hill via Ivanhoe by rail. The railway came to play a significant role in the history of the Aboriginal people of Ivanhoe through the protection period and afterwards.

2.2 Aboriginal ownership

Ivanhoe is located towards the southern end of country belonging to the Ngiyampaa Nation. The Ngiyampaa Nation itself was diverse. Dialect groups described themselves according to the characteristics of their own Country: the *Pilaarrkiyalu* (Belar Tree mob), and *Nhiilyikiyalu* (Nilya Tree mob) and, further to the north around Cobar, the *Karulkkiyalu* (Stone Country mob). These groups managed to stay on their own Country into the early years of the 20th century; following their traditional cultural practices until European colonisation, then working on the pastoral stations into which their land, the source of their economic and spiritual strength, had been appropriated. Throughout, Ngiyampaa retained spiritual links to significant places: Gundabooka, Mt Grenfell, Mt Manara, Keewong, Marfield, Neckarboo and many other locations. However, the nature of these attachments changed during the 20th century as a

result of the intervention of governments blind to the idea of Country at the centre of being.

By the early years of the twentieth century, as camping on the pastoral properties became less viable as a way of life, people began to gather at Carowra Tank (*Kirraawara* in Ngiyampaa language), about 80 km north-east of Ivanhoe, which was located at the centre of the Ngiyampaa people's *ngurrampaa*, which translates as 'camp-world'. Carowra Tank was a natural drainage depression and had been part of the *ngurrampaa* of the Ngiyampaa for millennia. A reservoir was constructed in the 1880s, and in 1907, 270 acres in two parcels of land around the reservoir were gazetted as a reserve, and rations delivered from Mossiel. When the Condobolin – Menindee railway link was built in 1919, closer settlement ensued and the groups known as the Keewong and Trida mobs (both *Pilaarrkiyalu*) moved into Carowra Tank. This was in a time of drought and the reservoir provided some security of water supply. In 1923, about 170 people from Trida went to live at Carowra. The reserve became an Aborigines Protection Board (APB) managed station in 1926, with a resident white manager. Two room corrugated iron huts and a school were provided. People continued to move from surrounding stations to Carowra Tank, with a large group of people from Marfield, the *Nhiilyikiyalu*, who spoke both Ngiyampaa and Paakantji, being forcibly moved in by the APB in 1927. During the early 1930s, as a result of unemployment, further, formerly independent families from Hillston, the Darling River and other localities settled at Carowra.

In 1933 the water supply at Carowra Tank failed, and the APB, operating under a new policy of concentration, opened a new reserve at Menindee. On 29th September 1933, the 270 or so residents of Carowra Tank were loaded onto cattle trucks, their houses and shelters were set alight and the Carowra residents taken to the railway platform at Conoble, where they were put onto the train to make the journey to Menindee. At the same time, the APB removed the Paakantji living along the Darling River from Wilcannia to Pooncarie to the Menindee Government Station, located about 11 km from Menindee on the Darling River.

The Ngiyampaa and Paakantji peoples did not traditionally have much in common but made a life together over the ensuing years. The morbidity and mortality rates at Menindee were high, with a high incidence of respiratory illnesses including tuberculosis. Much of this illness was attributed to the proximity of the tin hut housing provided to ancient, eroding burial sites. Living conditions at Menindee Mission were poor and environmental health issues took their toll, as did the sorrow of living in exile from Country. The stealing of children and their removal to children's homes compounded the anguish of both Ngiyampaa and Paakantji peoples.

In 1949, the Aborigines Welfare Board (AWB), as the APB had been reconstituted in 1940, closed Menindee Mission without warning and moved the residents to Murrin Bridge at Lake Cargelligo. Lake Cargelligo is not in either Ngiyampaa or Paakantji country, but is in traditional Wiradjuri lands, and much further away from the Ivanhoe residents' own country than Menindee was. Most of the Carowra Tank people made the move from Menindee to Murrin Bridge; most of the Paakantji moved to Menindee town or Wilcannia.

The former Carowra Tank reserve remains an important site for Aboriginal people in Ivanhoe, particularly the descendants of those who lived there in the period prior to 1933. The reserve was revoked in 1937, and the area is now part of a pastoral lease. Ivanhoe people still identify strongly, too, with the places their ancestors lived for millennia: Keewong, Trida, Marfield and other significant places across the length and breadth of their *ngurrampaa*.

2.3 Aboriginal people and the town of Ivanhoe

Following the repeal of the Aborigines Protection Act and the abolition of the AWB, many Murrin Bridge residents moved to Ivanhoe and other towns in the Murdi Paaki Region. Aboriginal people living in Ivanhoe today are largely Ngiyampaa and Paakantji, many of whom have ancestral links to the swathe of country between Ivanhoe and Cobar and, specifically, to Carowra Tank or who, themselves, were born and lived at

Murrin Bridge. A move to Ivanhoe provided the opportunity, for many, to live as close as possible to places with which they were traditionally or historically affiliated, and to employment prospects provided by pastoral industry and by the NSW Government Railways, which, until the 1990s, had a crewing depot at Rail Town (about 3 km south of Ivanhoe). The depot incorporated housing, crew barracks, workshops, and other infrastructure as well as the station.

By the early 1980s, Aboriginal community-controlled organisations began to form, as a pathway to self-determination in service delivery. The Ivanhoe Aboriginal Corporation was registered on 9th March 1981 and became a provider of Aboriginal social housing to the community. Following from the enactment of the NSW Aboriginal Land Rights Act in 1983, the Ivanhoe Local Aboriginal Land Council (LALC) was established, with responsibilities for land management and culture as well as provision of Aboriginal social housing. In the long term, neither organisation was a viable provider of housing, and Murdi Paaki Regional Housing Corporation acquired the housing stock of both the Ivanhoe Local Aboriginal Land Council and Ivanhoe Aboriginal Corporation when ownership of a total of nineteen properties was transferred in the late 1990s. The Ivanhoe LALC is not currently operating; the Ivanhoe Aboriginal Corporation was deregistered on 21st June 2010.

The Rail Town infrastructure was repurposed as a minimum security correctional centre, Warakirri, which opened in 1999. Warakirri became the largest employer in the Ivanhoe; however, it closed in June 2020.

In 2002, the Ivanhoe Community Working Party (CWP) was established. The CWP provides the Aboriginal community of Ivanhoe to promote their strategic interests on an equal footing with other, often larger communities in the Murdi Paaki Region. Since its inception, the Ivanhoe CWP has been proactive in representing the needs and aspirations of the Ivanhoe community through the Murdi Paaki Regional Assembly, and directly to governments.

2.4 Participation in prior initiatives

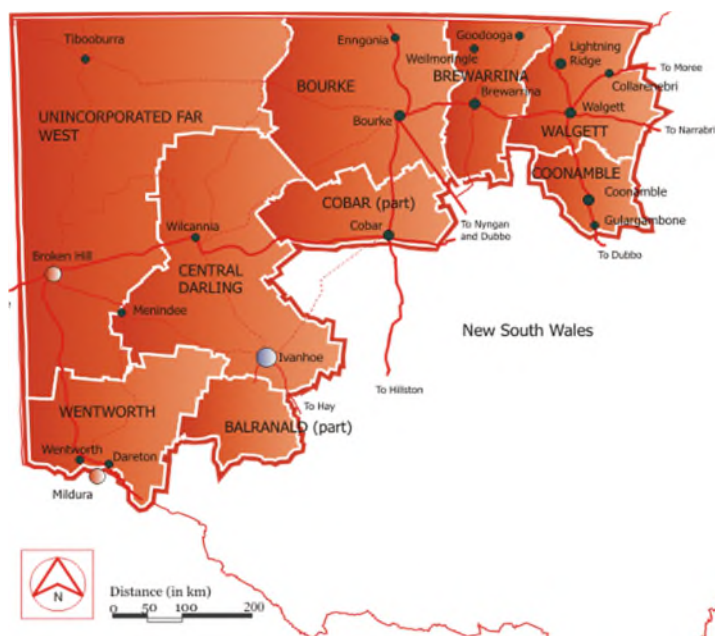
A Housing and Environmental Health Plan was prepared for the Ivanhoe community in 2004 but the recommendations were not acted upon in any meaningful way. The community has benefited from housing repair and maintenance programmes from time to time, but budgets have, invariably, limited the scope of work carried out. The Community Working Party has had no input to decision-making in respect of these works other than to comment on the substandard quality of materials and workmanship.

3 GEOGRAPHY

3.1 Location

Ivanhoe is located in the far west of New South Wales 930 km to the west of Sydney by sealed road. The nearest service centre of any size accessible by sealed road is Hay, 208 kilometres to the south.

Figure 3.1: Location



3.2 Access

Ivanhoe is located on the Cobb Highway which links Hay with Wilcannia. The highway is sealed single carriageway to 10 km north of Ivanhoe with the remaining 86 km to Wilcannia of gravel surfacing. Plans are in train to seal the gravel section over the next five years. The recently completed sealing of the final section of the road connecting Ivanhoe with Balranald to the south west (228 km) now provides an alternative all weather access. Unsealed roads connect Ivanhoe with Cobar to the north-east (274 km) and Menindee to the west (205 km). All unsealed roads are impassable in wet weather.

The main east-west railway passes through Ivanhoe. The transcontinental Indian Pacific passenger service operates weekly between Sydney and Perth but does not stop at Ivanhoe. The only stopping service is the Outback Explorer weekly service between Sydney and Broken Hill.

Ivanhoe aerodrome to the east of the town has received infrastructure improvements in recent years sufficient to allow the facility to become registered in accordance with CASA regulations. Licensing costs are being borne by the Royal Flying Doctor Services, its principal user, in the interim. The longest runway is 1,250 m in length, north south, and is asphalt surfaced. An unsurfaced east west runway is of 1,020 m length.

3.3 Topography

Ivanhoe has little topographic relief. Discernible falls in ground level occur in a southerly direction but overall grades do not exceed 1%. Elevation is approximately 100 m above sea level.

3.4 Soils

Ivanhoe is in the Murray Darling Depression bioregion. The landscape comprises dunes and low sandy rises with relief to 5 m, sandplains and rolling plains of brown chalky soils interspersed with lakes, swamps and depressions, including the basins of the Willandra Lakes complex. Lakes and depressions have clay floors: grey cracking clays are associated with the more saline lakes.

Soil sampling and testing has been not been undertaken as part of this planning process but site classification should be carried out in conjunction with site specific investigations associated with any new house design. The soil profile is expected to comprise competent red brown silty sands with some cementing and small amounts of clay. Based on observation of performance of existing foundations, it is unlikely soils are significantly reactive.

3.5 Flora and fauna

Native vegetation communities associated with the area around Ivanhoe vary with soil type and range from open grassy expanses to thick belah woodland, often accompanied by wilga and rosewood species, with varying densities of understorey species. Patches of dense woody shrub occur in open woodland and treeless expanses with turpentine and narrow-leaved hopbush prominent. Low perennial vegetation is sparse, and often dominated by copperburrs. Most grasses are not perennial. The clay floors of lakes and depressions support vegetation to the extent allowed by the presence or absence of salt and gypsum.

Although largely uncleared, the composition and structure of vegetation and native animal communities has been altered as a result of grazing by stock, introduction of feral animals, and changed fire regimes. Introduced species have adapted to the harsh conditions and provide competition to indigenous fauna. Habitat of native species is being destroyed by feral pigs and goats while small native animals and birds are preyed upon by foxes and feral cats. Irrespective of this, there are no protected or endangered species in the locality.

3.6 Climate

Ivanhoe's climate may be described as hot semi-arid. Data are, or have been, recorded at two stations in, or near the town: Ivanhoe Post Office (049019) from 1884 to 2016 and Ivanhoe Aerodrome (049000) from 2000 to date. Unless otherwise noted, the following climate data is for the Post Office station which recorded rainfall data from 1884 onwards and temperature (Figure 3.2) and other data from the period 1939 to 1945 onwards.

Figure 3.3 illustrates a slow gradual rise in maximum monthly temperature from 1941 and Figure 3.4 shows the corresponding data for Ivanhoe aerodrome from 2000 and an accelerated rate of temperature rise over recent years.

Figure 3.2: Temperatures

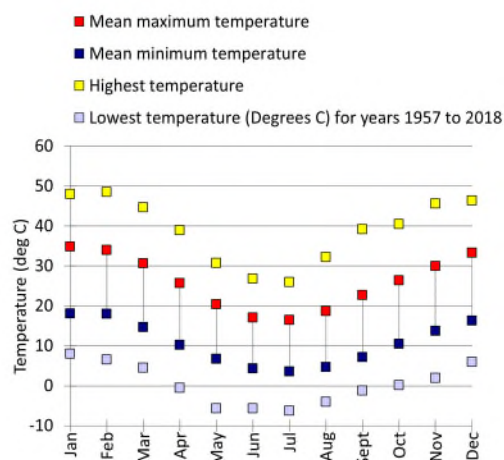


Figure 3.3: Increase in highest monthly temperatures

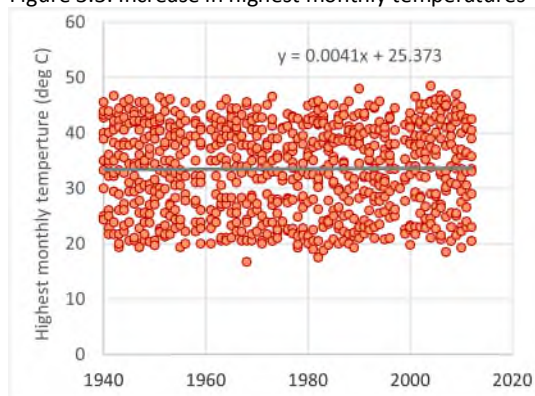
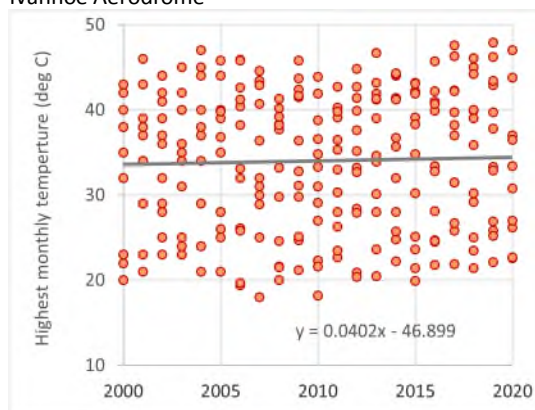


Figure 3.4: Increase in highest monthly temperatures, Ivanhoe Aerodrome



The mean number of days with high temperatures as shown in Figure 3.5 will steadily increase: the community experiences temperatures above 30°C

for approximately one third of the year. Figure 3.6 investigates the change in the mean number of days with temperatures $\geq 35^{\circ}\text{C}$ over the warmer months of the year in 30-year periods from 1959. Whereas the higher temperatures are increasing at a modest rate, the number of days temperatures above 40°C are occurring in December and January show a noticeable increase.

Figure 3.5: Days with higher temperatures, 1959 to 2018

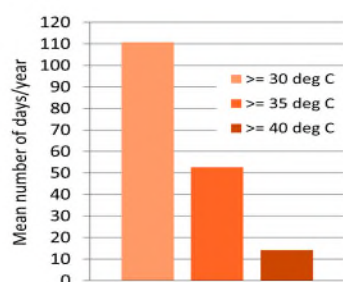
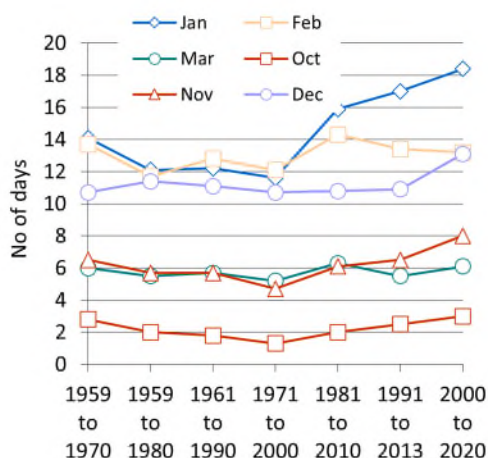


Figure 3.6: Mean number of days with temperatures $\geq 35^{\circ}\text{C}$, 1957 to 2015, Ivanhoe Post Office and Ivanhoe Aerodrome



Mean annual rainfall as calculated from 56 years of record between 1947 and 2018 is 253.6 mm. Monthly distribution is shown in Figure 3.7 with average monthly pan evaporation estimated from the Bureau of Meteorology evaporation mapping. Daytime relative humidity is low for the entire year, as shown by Figure 3.8.

Figure 3.7: Rainfall and monthly pan evaporation

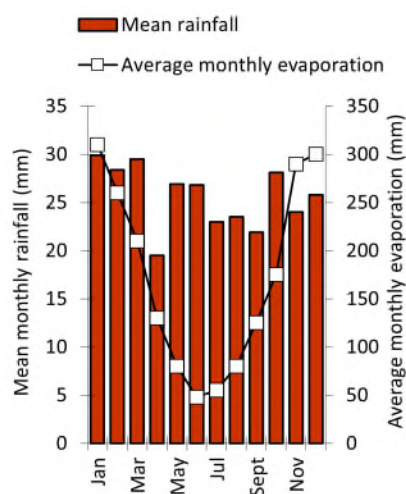
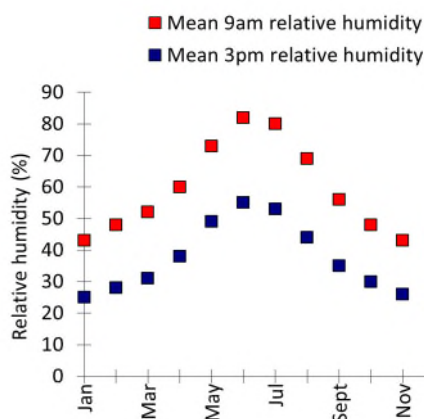


Figure 3.8: Relative humidity



Wind is more usually from the south east in the morning (9.00 am), tending to between north east and south west, while wind in the afternoon (3.00 pm) is mainly from the south west tending to south. Monthly mean wind speeds and maximum wind gusts are shown in Figure 3.9 and Figure 3.10.

Figure 3.9: Wind speed

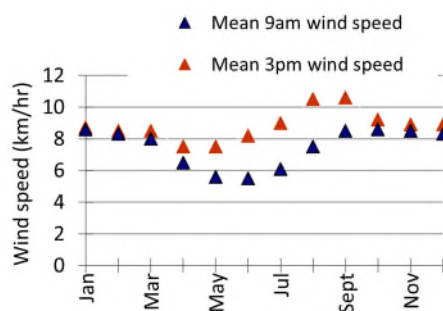


Figure 3.10: Maximum wind gusts, Ivanhoe aerodrome

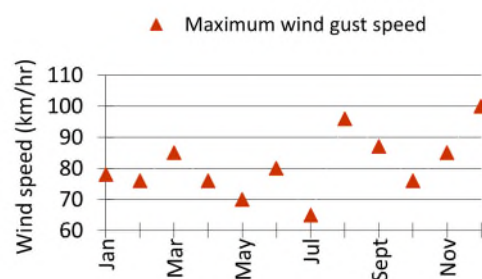
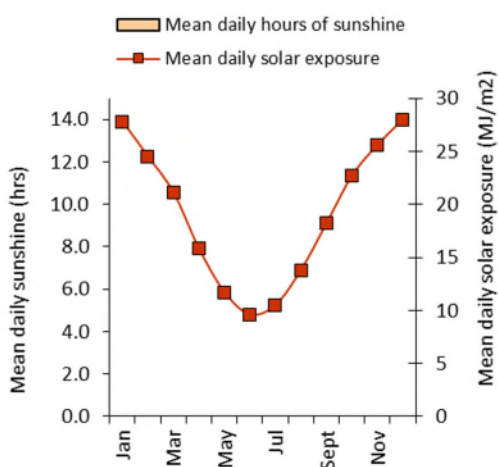


Figure 3.11: Sunshine and solar exposure



Data for mean daily hours of sunshine are not available.

3.7 Flooding and drainage

There are no major watercourses present in close proximity to Ivanhoe although several small ephemeral watercourses do exist, draining to numerous isolated, closed depressions.

Table 3.1 records the highest daily rainfall and the year of occurrence for each month.

Jan	Feb	Mar	Apr	May	Jun
102.4	92.2	81.3	81.3	58.4	60
1979	1946	1939	1939	1906	1995

Jul	Aug	Sept	Oct	Nov	Dec
38.4	49.2	38.4	80.2	79	85.3
1923	2004	1903	2010	1961	1983

Intensity-frequency-duration values are shown at Table 3.2.

Duration	Annual Exceedance Probability (AEP)			
	IFD Design Rainfall Depth (mm)			
	10%	5%	2%	1%
1 min	3.00	3.61	4.45	5.11
2 min	5.13	6.18	7.47	8.50
3 min	7.01	8.43	10.2	11.6
4 min	8.65	10.4	12.7	14.5
5 min	10.1	12.1	14.8	17.0
10 min	15.5	18.6	23.0	26.5
15 min	19.1	22.9	28.4	32.7
20 min	21.7	26.1	32.4	37.3
30 min	25.5	30.7	38.0	43.7
1 hour	32.0	38.5	47.3	54.2
2 hour	38.8	46.3	56.4	64.2
6 hour	51.6	60.7	73.4	83.2
9 hour	57.6	67.5	81.6	92.6
12 hour	62.4	73.1	88.5	100
18 hour	70.0	82.1	99.6	113
24 hour	76.0	89.3	109	124
48 hour	91.4	109	133	153
72 hour	99.8	120	147	170
96 hour	105	127	156	180
120 hour	107	130	161	185

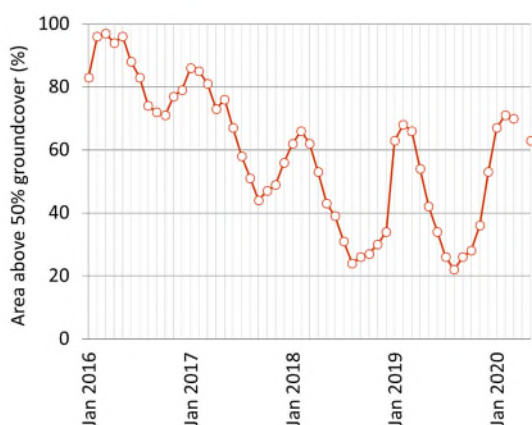
3.8 Dust

Data collected by the NSW Office of Environment and Heritage Rural Air Quality network DustWatch

programme revealed that dust storms occurred with record-breaking frequency in 2019 in the Western Natural Resource Management (NRM) Region. January 2019 was the dustiest month recorded across the Region since measuring commenced and Ivanhoe (Kilfera Station) experienced 229 hours of dust during that October.

The cause of dust generation is a combination of very low groundcover resulting from prolonged dry conditions, high temperatures and increased hours of strong winds (> 40km/h) associated with the passage of cold fronts bringing with them north to north westerly winds. Figure 3.12, viewed in conjunction with Figure 3.9 which shows mean wind speeds in the range 6-10 km/hr, suggests that Ivanhoe is less prone to dust events than some other communities in the Murdi Paaki Region.

Figure 3.12: Seasonal variation in the land area with groundcover exceeding 50%, Western NRM

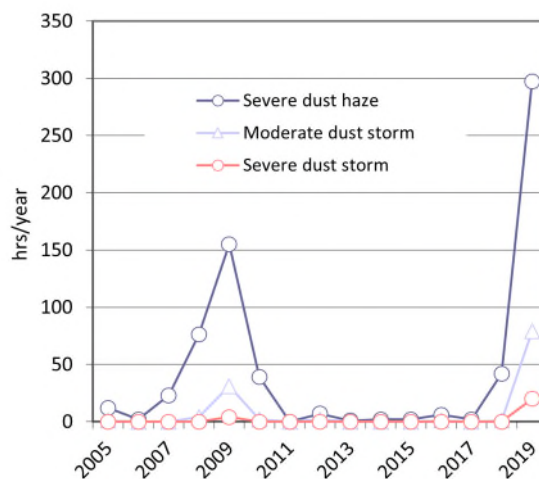


The adverse health effects of fine particle pollution associated with dust generation are:

- A worsening of existing health conditions among at-risk groups: the very young, the elderly and those with respiratory conditions;
- A greater level of hospitalisation; and
- An increase in mortality.

Figure 3.13 shows the prevalence of dust haze and storms over the period 2005 to date.

Figure 3.13: Prevalence of dust haze and storms at Ivanhoe



3.9 Native title

Native Title recognition was granted to the Barkandji Traditional Owners (Barkandji and Malyangapa People) in 2015 to a large number of lands in western NSW, the eastern extremity of which terminates to the west of Ivanhoe township. The town is not affected by the claim.

A claim by the Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan peoples for substantial lands to the east of Ivanhoe was registered with the National Native Title Tribunal on 24 April 2012 (NC2012/001). The claim, which includes that part of the town to the east of the centreline of the Cobb Highway, is 'active'.

3.10 Sites of cultural significance

A preliminary search of the NSW DECC Aboriginal Heritage Management Information System (AHIMS) for sites of cultural significance within the rectangle formed by latitudes 32.937°S to 32.865°S and longitude 144.244°E to 144.358°E, with the township at the centre, indicates the existence of numerous recorded Aboriginal sites in or near the above location. In the interests of sites preservation, and as a condition of accessing the data, no details are included in this Plan.

3.11 Economic geography

The Ivanhoe economy is almost totally reliant on agriculture but with pastoral activity becoming more marginal, the town is far from prosperous. A change in agricultural practices, requiring reduced labour, and the drought have contributed to further population decline. Local businesses are few: one shop, one fuel outlet a single caravan park and one hotel/motel. The RSL club is the community hub. The Ivanhoe Multi Service Outlet coordinates Meals on Wheels, Centrelink assistance, aged care referrals and arranges weekly medical transport to appointments out of town.

A significant event to impact the local economy was the closure in June 2020 of the Ivanhoe Warakirri Correctional Service (IWCS) minimum security facility, which accommodated up to 50 residents. The facility opened in 1999 and became the largest employer. Closure resulted in the loss of employment and the commercial benefits that flowed from the presence of the facility.

A recent flurry of residential property purchases appears to be driven by an expectation that opportunities will arise from an expansion of mineral sands mining activity between Ivanhoe and Balranald. It is understood that miner Tronox Holdings will transport the mineral concentrate to a rail loading facility at Ivanhoe for transfer to a mineral separation plant in Broken Hill. A small-scale historical mining activity has been for gypsum but the only significant production has been from the Manara Gypsum Mines 83km to the west of Ivanhoe.

4 THE POPULATION

4.1 Population profile

Table 4.1: Total population, Ivanhoe (L)

199	persons
Change from 2011 Census	0

Source: ABS Census

Table 4.2: Aboriginal population %, Ivanhoe, Region, State

24%	n=48
Murdi Paaki Region	23%
New South Wales	3%

Source: ABS Census 2016

Figure 4.1: Population change, 2001 to 2016

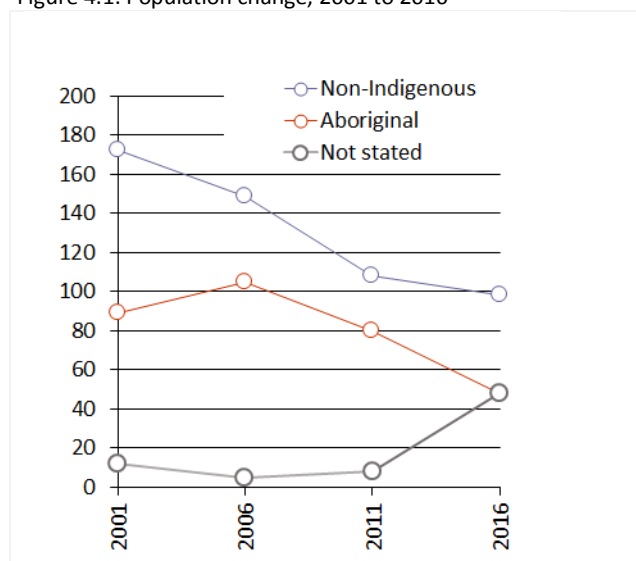


Figure 4.1 is based on census data. The 2001 data are for place of enumeration; in all subsequent censuses, the data are for place of usual residence. The most accurate count of the population is the Estimated Resident Population (ERP); however, the finest scale at which this is available is by local government area. At the 2016 ABS Census, on the basis of comparison with the ERP, the Aboriginal population of the Central Darling Shire was

undercounted by 20%, and the non-Indigenous population by 11%, not including respondents who did not answer the Aboriginality question.

Census data for the Ivanhoe locality indicate that the ABS has imputed populations for 22 dwellings which were thought to be occupied on census night but which returned no census form. Imputation is a statistical process for predicting values where no response was provided. The ABS impute values for four variables: sex, age, place of usual residence and registered marital status, but not for Aboriginality. It does this by locating a 'donor record' and copying the relevant responses to the record requiring imputation. The donor record will have similar characteristics, will have the required variables stated, and will be located geographically as close as possible to the location of the record to be imputed. For Ivanhoe, the ABS imputed a total of 48 persons (27 male and 23 female) to the 22 dwellings. It is not possible to know how many of these dwellings housed Aboriginal households. Indeed, given the arbitrary nature of the process, any one of the 22 dwellings could equally house the population imputed to it on the basis of the composition of the donor record household or a group household of 80-year olds. It is, however, on the basis of the undercount, likely that a greater proportion of these dwellings house Aboriginal households.

Where possible, the Murdi Paaki Region comparison geography used in this Plan is the aggregated 154 SA1s that approximate the Region. For variables where SA1 level data are not published, either the 8 LGAs approximating the Murdi Paaki Region or the NWNSW IREG has been adopted.

KEY FINDINGS

- Of those enumerated in Ivanhoe on Census night 2016, 20 Aboriginal people and 16 non-Aboriginal people were prisoners held at the Warakirri Correctional Centre.
- Since 2001, the total population has been decreasing at an average rate of 2.3% p.a.
- The Aboriginal population fraction aged under 15 years is only two-thirds that for the Murdi Paaki Region but is nearly half as high again as for the non-Indigenous population of Ivanhoe.

- No Aboriginal person who participated in the 2016 Census indicated that they were in a couple relationship.
- Aboriginal and non-Indigenous households are almost equally likely to comprise a person living alone; Aboriginal households in Ivanhoe are more than twice as likely as Aboriginal households in the Region to be lone person households.
- When compared with a non-Indigenous family, Aboriginal families living together in a household are over 80% more likely to be a single parent family.

Figure 4.2: Population age distribution

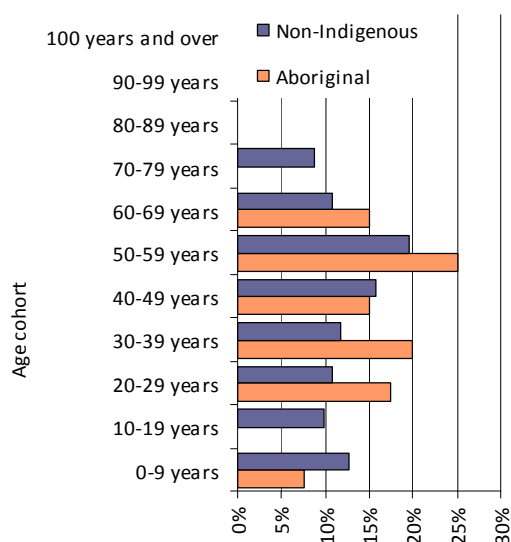
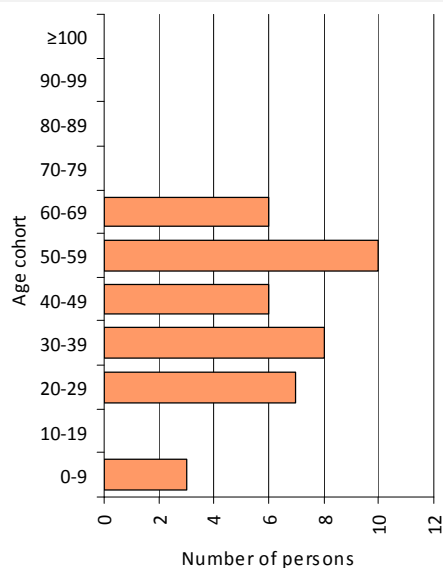


Figure 4.3: Aboriginal population age distribution



Population fraction	Aboriginal	Non-Indigenous
Table 4.3: Median age of persons(years)		
	43	
Range	35-39	
Murdi Paaki Region	26	46
New South Wales	22	38
Table 4.4: Population aged under 15 years (2016)		
	n=48	n=98
Of population fraction	19%	13%
Murdi Paaki Region	32%	16%
New South Wales	34%	18%
Table 4.5: Social marital status (Persons 15 years and over)		
Registered marriage	0%	50%
De facto marriage	0%	10%
Not married	100%	40%
Table 4.6: Lone person households		
	n=16	n=35
	50%	49%
Murdi Paaki Region	21%	36%
New South Wales	15%	24%
Table 4.7: Family household family composition		
One parent	31%	17%
Couple, no children	0%	23%
Couple, with children	19%	11%
Other family	0%	0%
One parent families:		
Murdi Paaki Region	43%	15%
New South Wales	36%	15%

Population fraction	Aboriginal	Non-Indigenous
Table 4.8: Multi-family households (of all family households)		
	n=8	n=18
	0%	0%
Murdi Paaki Region	4%	1%
New South Wales	4%	2%
Table 4.9: Families with resident non-dependent children		
	n=4	n=18
	100%	0%
Murdi Paaki Region	25%	18%
New South Wales	25%	21%

4.2 Educational status

KEY FINDINGS

- No Aboriginal children aged 3 or 4 were enumerated in the 2016 Census, and no Aboriginal pre-school attendance was recorded.
- On Australian Early Development Census (AEDC) indicators, children commencing their first year of full-time schooling in the Central Darling LGA have not reached the same stage of early childhood development as their counterparts in NSW, but the gap has narrowed.
- Student attendance level (the proportion of students attending 90% or more of the time) lags that of non-Indigenous students by a substantial margin at Ivanhoe Central School.
- The 2015 NAPLAN tests indicate educational attainment at Ivanhoe Central School is close to, below or well below the average of all Australia students depending on the skills area. Results deteriorate between Year 3 and Year 5. No more recent data are publicly available.

- The 2016 Census did not enumerate any Aboriginal people aged 15 to 19 years so it is not possible to provide any indication of the educational attainment of people in this age cohort who have left school.
- Aboriginal adults were 56% as likely as non-Indigenous adults to hold a post-school qualification at any level, and all post-school qualifications held by Aboriginal people were at certificate level in the vocational system. The Aboriginal population aged over 15 years has a slightly higher proportion of adults with a post-school qualification than for the Murdi Paaki Region generally but lower than for the Aboriginal population of NSW.

Table 4.10: Educational institution attended by the Aboriginal population of Ivanhoe	
	n=48
Preschool	0
Infants/primary - Government	6
Secondary - Government	0
Technical or Further Educational Institution	0
University or other Tertiary Institution	0
Other	0
Not stated	25

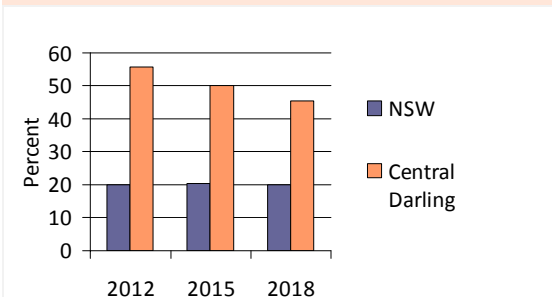
Figures 4.4 and 4.5, and Table 4.4, consider child vulnerability as measured across several areas or domains. The domains are:

- Physical health and wellbeing;
- Social competence;
- Emotional maturity;
- Language and cognitive skills (school-based); and
- Communication skills and general knowledge.

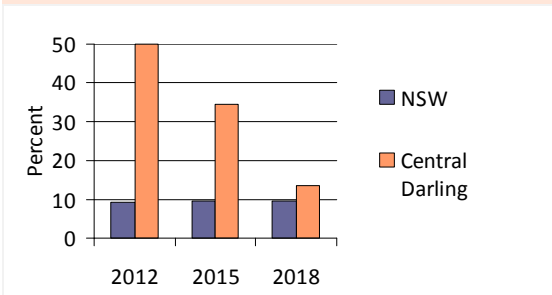
The results of the assessment provide a platform for the community to work collaboratively with early childhood education services, schools and other early years services to support local children. Only summary information is included but this is enough to indicate whether intervention might be needed.

Figure 4.4: AEDC summary indicator of developmental vulnerability (all children)

One or more domains



Two or more domains



Aboriginal children (n=16 or 57% of 28)

Note: Includes Menindee, Ivanhoe, Wilcannia, White Cliffs and Tilpa

Table 4.11: AEDC vulnerability indicators

	Vuln 1	Vuln 2
Central Darling	45.5%	13.6%

Source: Australian Early Development Census, Community Profile 2018, Far West NSW

Figure 4.5: Student attendance level (proportion of students attending 90% or more of the time), 2019 Semester 1

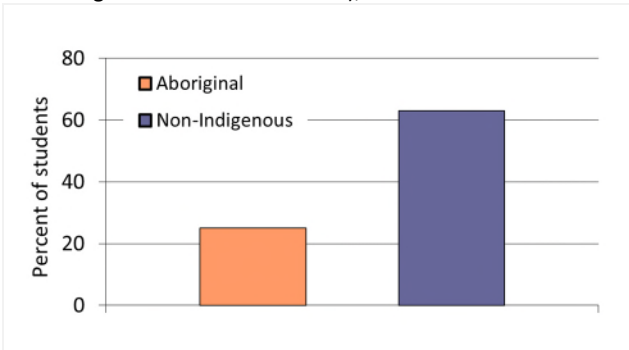


Table 4.12: Educational attainment, NAPLAN, Ivanhoe Central School average when compared with all Australian students, 2015 test results

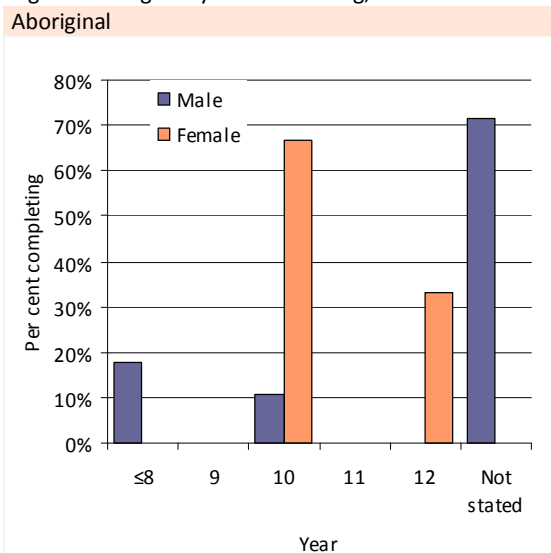
	Reading	Writing	Spelling	Grammar	Numeracy
Year 3	3	5	3	3	5
Year 5	3	5	4	4	4

Legend

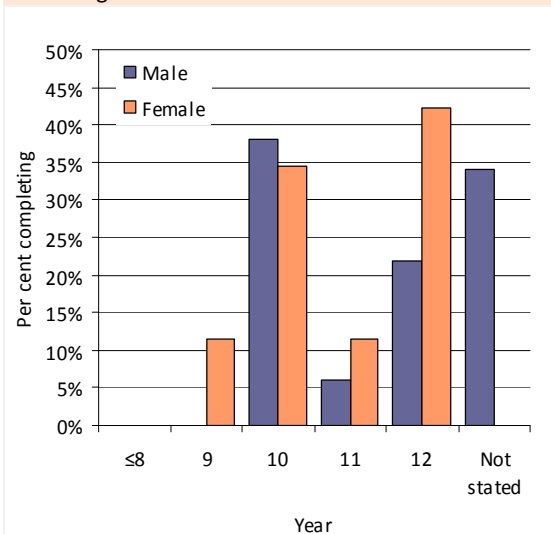
Above average	2	Close to	3
Below average	4	Well below	5

Source: acara MySchools website

Figure 4.6: Highest year of schooling, all adults



Non-Indigenous



Population fraction	Aboriginal	Non-Indigenous
Table 4.13: Percentage of persons aged 15 years and over with a vocational qualification		
	n=15	n=67
Cert I-IV	27%	30%
Murdi Paaki Region	18%	26%
New South Wales	25%	20%
Table 4.14: Percentage of persons aged 15 years and over with an undergraduate diploma		
	n=15	n=67
Diploma and Advanced Diploma	0%	5%
Murdi Paaki Region	5%	7%
New South Wales	7%	10%
Table 4.15: Percentage of persons aged 15 years and over with a tertiary qualification		
	n=15	n=67
Degree and higher	0%	13%
Murdi Paaki Region	4%	12%
New South Wales	8%	27%

4.3 Economic participation

Population fraction	Aboriginal	Non-Indigenous
Table 4.16: Labour force status (Percent of labour force)		
	n=14	n=53
In full-time or part-time work	100%	94%
Unemployed, looking for work	0%	6%
Murdi Paaki Region	76%	94%
New South Wales	85%	94%
29% of those employed work part-time		

Table 4.17: Participation in the labour market (Percent of population aged 15 and over)		
	n=39	n=85
In labour force	36%	62%
Not in labour force	64%	38%
Murdi Paaki Region	44%	61%
New South Wales	56%	64%
Table 4.18: Employment to population ratio (Percent of population aged 15 and over)		
	n=39	n=85
Employment to Population ratio	36%	59%
Murdi Paaki Region	34%	57%
New South Wales	47%	60%
Table 4.19: Occupation of all persons employed		
Managers	0.0%	28.6%
Professionals	0.0%	0.0%
Technician/trades	0.0%	0.0%
Community service workers	28.6%	31.0%
Clerical/admin workers	0.0%	7.1%
Sales workers	0.0%	0.0%
Machinery operators	0.0%	16.7%
Labourers	71.4%	16.7%
Undefined	0.0%	0.0%

KEY FINDINGS

- No Aboriginal people in Ivanhoe reported that they were unemployed at the 2016 Census; however, with a low labour force participation rate, the employment to population ratio for Aboriginal people in Ivanhoe implies that fewer than two in five adults are in any form of employment.
- All Aboriginal workers who reported their occupation category were employed as either a community/personal service worker or a labourer.
- The public administration and safety industry sector employs the largest proportion of the Ivanhoe workforce, followed by agriculture,

education and training, and health care and social assistance. All Aboriginal workers were employed in either health care and social assistance or administrative and support services.

- Data for Central Darling LGA indicate a slow decline over time in the number of businesses. There was no Aboriginal engagement as proprietors of businesses, whether sole traders, employing or incorporated enterprises enumerated in the 2016 Census.

Figure 4.7: Hours worked by age group, all persons employed

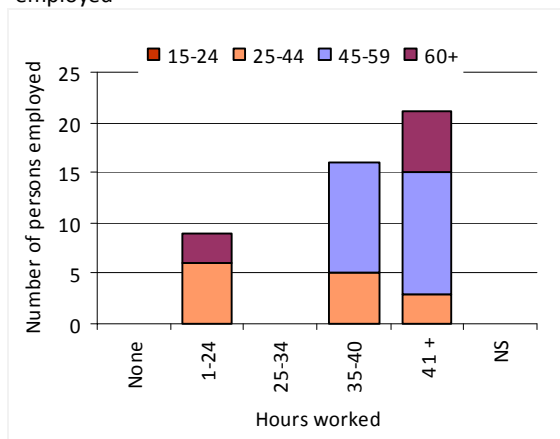


Table 4.21: Number of Aboriginal workers employed in the public and private sectors

Australian Government	0
NSW Government	4
Central Darling Shire Council	0
Private sector	8
Not stated	0

Table 4.22: Total number of businesses, Central Darling LGA

At 30 th June 2018	
No of employees	No of businesses
Nil	101
0-4	42
5-19	4
20 or more	3

Table 4.23: Business entries and exits, Central Darling LGA

At 30 th June 2018	
Year	Change in number
2015	-3
2016	2
2017	-2
2018	-2

Table 4.20: Industry of employment – Total population

Industry	Aboriginal		Non-Indigenous	
	No employed	% of total employed	No employed	% of total employed
Public Administration and Safety	0	0%	17	47%
Agriculture, Forestry and Fishing	0	0%	6	17%
Education and Training	0	0%	4	11%
Health Care and Social Assistance	4	57%	0	0%
Construction	0	0%	3	8%
Accommodation and Food Services	0	0%	3	8%
Transport, Postal and Warehousing	0	0%	3	8%
Administrative and Support Services	3	43%	0	0%
Inadequately described or not stated	0	0%	0	0%

4.4 Income

Population fraction	Aboriginal	Non-Indigenous
Table 4.24: Median total household income		
\$/week	1,156	
N-W NSW IREG	907	1,013
New South Wales	1,214	1,498
Table 4.25: Estimates of personal income (Total population), Central Darling LGA		
Median employee income (\$) (2016)	36,876	
Income share of top 10% of earners (excl. government payments)	33.3%	
FW and Orana SA4	44,418	
New South Wales	49,256	

Figure 4.8: Average annual growth in median employee income 2013-2016, Central Darling LGA

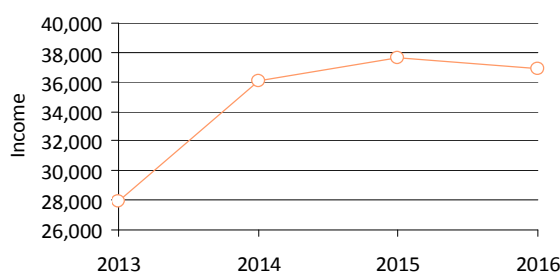


Table 4.26: Sources of income support, Central Darling LGA	
In 2016, percentage of total population aged 15 and over receiving:	
Age pension (n=200)	11%
Carer payment (n=31)	2%
Disability support pension (n=133)	7%
Newstart allowance (n=150)	8%
Parenting payment, single (n=59)	3%
Family tax benefit A (n=163)	9%
Family tax benefit B (n=140)	8%
Commonwealth rent assistance (n=122)	7%

KEY FINDINGS

- No Aboriginal-specific data are published for median individual, family or household incomes so it was not possible to compare medians between the Aboriginal and the non-Indigenous population fractions.
- It is well established that the Murdi Paaki Region suffers the highest level of socio-economic disadvantage in NSW. Central Darling LGA is placed second lowest in NSW in the Index of Relative Socio-economic Disadvantage (IRSD) ranking. While rankings are not available for individual localities, the IRSD for the Ivanhoe SA1 is slightly higher than for the LGA as a whole. Ivanhoe places within the 13th percentile nationally in terms of socio-economic disadvantage as indicated by this index.
- The status of Aboriginal people in Ivanhoe is compounded by the fact that no Aboriginal person was enumerated as being employed in the top three industry sectors in the local economy.

4.5 Measure of socio-economic disadvantage

Table 4.27: SEIFA Index of disadvantage 2016	
SEIFA Index (IRSD), Ivanhoe (SA1:2109810)	891
SEIFA Index (IRSD) – Central Darling LGA	817
Rank in NSW	129 th of 130
Murdi Paaki Region:	
Highest (Cobar)	968
Lowest (Brewarrina)	757

5 COMMUNITY HOUSING PROFILE

5.1 A statistical snapshot

Population fraction	Aboriginal	Non-Indigenous
Table 5.1: Dwelling types		
Total number	14	38
Separate houses	14	34
Not stated	0	5
Table 5.2: Number of bedrooms per dwelling		
0 or 1 bedroom	0	0
2 bedrooms	0	6
3 bedrooms	4	21
4 bedrooms	3	13
5 bedrooms and more	0	0
Not stated	3	0
Table 5.3: Tenure type		
Owned outright	0	19
Owned with a mortgage	0	3
Rented	13	12
Occupied rent free	0	0
Other tenure type	0	0
Not stated	3	0
Not applicable	28	
Table 5.4: Tenure type - Renters		
Real estate agent	0	0
State or territory housing authority	9	0
Person not in same household	0	0
Housing co-operative, community or church group	0	0
Other landlord type	0	7
Tenure type not stated	3	0

Population fraction	Aboriginal	Non-Indigenous
Table 5.5: Landlord type		
State or territory housing authority	9	0
Employer - Government	0	9
Not stated	0	0
Not applicable	3	27
Total	14	38
Table 5.6: Households enumerated		
One family household	9	22
Multiple family household	0	0
Non-family household	7	17
Non-classifiable	0	0
Not applicable	0	0
Table 5.7: Occupancy		
One person	8	17
Two people	3	13
Three people	5	0
Four people	0	3
Five people and greater	0	0
Not applicable	54	
Table 5.8: Other forms of accommodation		
Non-private dwelling	0	0
Not applicable	14	38
Table 5.9: Weekly rent		
\$1-\$74	0	12
\$75-\$99	0	0
\$100-\$124	0	0
\$125-\$149	3	0
\$150-\$174	4	0
\$175-\$199	0	0
\$200 and greater	0	0

5.2 Population mobility

5.2.1 Characteristics of movement

Population fraction	Aboriginal	Non-Indigenous
Table 5.10: One year residential mobility		
Residents in the household aged one year and over with a different address one year ago		
All residents	0%	0%
Some of the residents	0%	0%
No resident	100%	100%
Residents in the household aged five years and over with a different address five years ago		
All residents	0%	33%
Some of the residents	0%	0%
No resident	100%	68%

5.2.2 Transport

Population fraction	Aboriginal	Non-Indigenous
Table 5.11: Access and mobility, % of households		
No motor vehicles	29%	0%
One motor vehicle	19%	39%
Two motor vehicles	33%	22%
Three motor vehicles	0%	14%
Four or more motor vehicles	0%	25%
Not stated	19%	0%

5.3 The housing market

Being a small community with little economic activity and few human services, a housing market exists only in the form of a very occasional transaction. A recent public auction which featured a number of properties disposed of, in the case of some, where Council rates and charges remained unpaid for a period of five years or longer, secured prices of between \$1 (62 Leichardt St) and \$1,000 for undeveloped lots to a maximum of \$20,000 for a lot with dwelling house. MPRHC advise that a 4-bedroom transportable home in good condition on its own lot was valued in 2019 at \$65,000.

5.4 Building activity

Only one building approval for a new residential building was issued by Central Darling Shire in the period 2019-2020. The value attaching to this approval was \$120,000. The value of alterations and additions, including conversions, to residential buildings was reported as \$1,471,000. The value of non-residential building for the same period was \$1,150,000. It is not known in which communities these expenditures occurred nor the nature of the work but it is clear that building activity is subdued.

5.5 Cadastre

Five Aboriginal organisations own land and housing in Ivanhoe: NSW Aboriginal Land Council, Ivanhoe Local Aboriginal Land Council (currently non-functional), Ivanhoe Aboriginal Corporation and Murdi Paaki Regional Housing Corporation. The former Murdi Paaki Regional Enterprise Corporation, now REDI.E, have title to one property used for staff accommodation but the flat has been unoccupied for many years.

A visual representation of their respective land holdings in the town area is shown at Figure 5.1 and the townscape at Figure 5.2.

NSW Aboriginal Land Council own the equivalent of 6 house blocks in town and Murdi Paaki Regional Housing Corporation own 19 house blocks in town. Ivanhoe Aboriginal Corporation have title to one block and the Land Council two blocks.

Table 5.12 to Table 5.15 provide details of the properties held by the organisations.

Table 5.12: Cadastral information for NSWALC properties

Lot	Section no.	Deposited Plan no.	WLL no.	Registered Proprietor	Area ha	Location	Vacant or developed
6	12	758537		NSW ALC	0.20	Franklin St	Demolished
54		47925		NSW ALC	1.01	Franklin St	V

Table 5.13: Cadastral information for ILALC properties

Lot	Section no.	Deposited Plan no.	WLL no.	Registered Proprietor	Area ha	Location	Vacant or developed
5	17	758537		Ivanhoe LALC	0.20	Raleigh St	Demolished
9	17	758537		Ivanhoe LALC	0.20	Leichardt St	Demolished

Table 5.14: Cadastral information for IAC properties

Lot	Section no.	Deposited Plan no.	WLL no.	Registered Proprietor	Area ha	Location	Vacant or developed
4		822015	13907	Ivanhoe AC	0.20	Leichardt St	V

Table 5.15: Cadastral information for Murdi Paaki Regional Housing Corporation properties

Lot	Section no.	Deposited Plan no.	WLL no.	Registered Proprietor	Area ha	Location	Vacant or developed
1	5	758537		MPRHC	0.20	Columbus St	D
2	5	758387		MPRHC	0.20	Columbus St	D
3	5	758387		MPRHC	0.20	Columbus St	D
6	5	758537		MPRHC	0.20	Raleigh St	D
7	5	758537		MPRHC	0.20	Raleigh St	D
8	5	758537		MPRHC	0.20	Raleigh St	D
9	5	758537		MPRHC	0.20	Raleigh St	D
10	5	758537		MPRHC	0.20	Raleigh St	D
2	7	758537		MPRHC	0.20	Raleigh St	Demolished
10	8	758537	13885	MPRHC	0.20	Bourke St	Dx2
7	18	758537		MPRHC	0.20	Livingstone St	Dx2
1		25210		MPRHC	0.20	Columbus St	V
10		25210		MPRHC	0.15	John St	D
13		25210		MPRHC	0.15	John St	V
18		25210		MPRHC	0.15	John St	D
19		25210		MPRHC	0.15	John St	D
9		29640		MPRHC	0.11	John St	D
2		25778		MPRHC	0.09	John St	Demolished

Table 5.16: Cadastral information for REDL.E properties

Lot	Section no.	Deposited Plan no.	WLL no.	Registered Proprietor	Area ha	Location	Vacant or developed
8		30593		MPRHC	0.08	Behring St	D

Figure 5.1: Property ownership

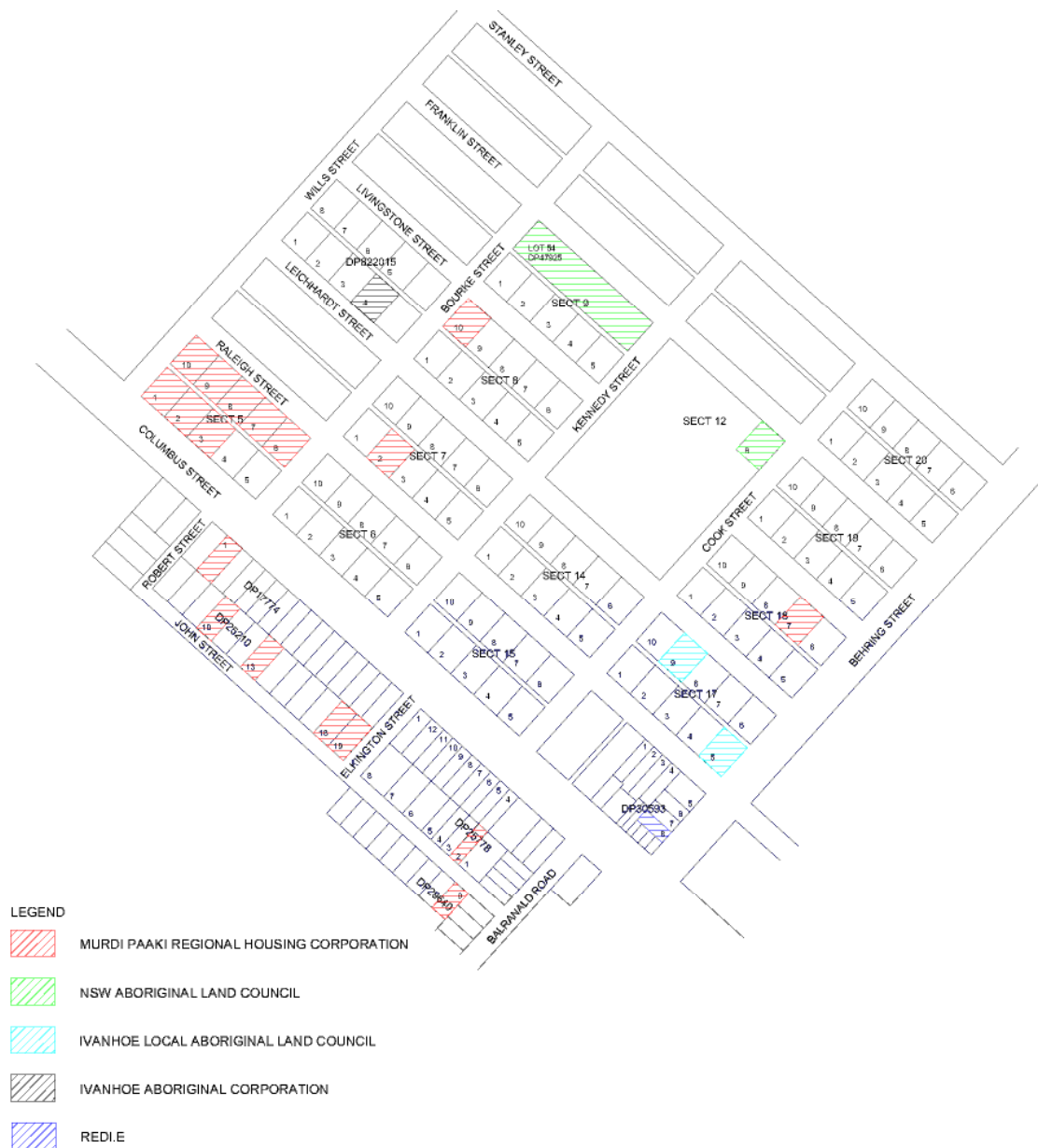


Figure 5.2: Ivanhoe township (Courtesy of LandsSix, NSW Government, Department of Customer Services, Spatial Services)



State Land Council's blocks, and Ivanhoe LALC blocks, are subject to restrictions on dealing in accordance with Section 40 of the Aboriginal Land Rights Act 1983, as amended. One Ivanhoe LALC property is subject to a caveat with State Bank of New South Wales, thought to be a mortgage over the property.

Two blocks are Western Lands Leasehold and, being within the town boundary, are subject to payment of an annual rent equivalent to 3% of the unimproved land value. Currently, this is in the amount of the minimum rent of \$472 per year. It is possible under the Crown Land Management Act 2016 to convert title over residential blocks to freehold subject to purchase at valuation. The

purchase price may be paid in instalments over a period of up to 20 years.

All MPRHC lots are subject to caveat 9343648C.

5.6 Housing assets

The level of accommodation provided by Aboriginal housing in Ivanhoe is given at Table 5.17.

Table 5.17: Housing assets				
Number of bedrooms				
Studio/1	2	3	4+	Total
Owner: Murdi Paaki Regional Housing Corporation				
Manager: Murdi Paaki Regional Housing Corporation				
-	-	13	4	17
Total				17

Figure 5.3 is illustrative of the general form of construction: suspended timber floor on piers, lightweight fibro clad construction with metal roof.

Figure 5.3: Typical form of construction



5.7 Planning controls

Areas within Ivanhoe are utilised for residential, commercial and industrial purposes. Council's Local Environmental Plan zones the developed area as RU5 Village with the stated objectives of:

- Providing for a range of land uses, services and facilities that are associated with a rural village;
- Retaining and facilitating expansion and redevelopment of the existing central business district of Ivanhoe and to further strengthen the core commercial functions; and
- Ensuring that development retains and enhances the existing village character.

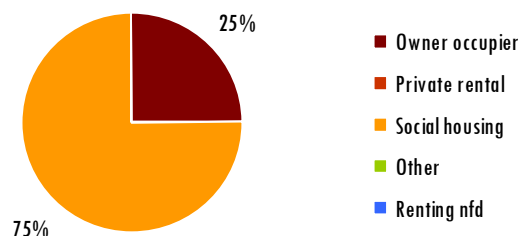
Within this zoning, building of dwelling houses is permitted with consent. Development controls such as building setbacks, height and floor to space ratio are set out in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008; Council not having a separate Development Control Plan.

5.8 Findings of the household survey

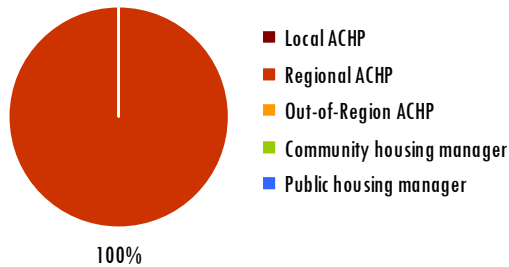
5.8.1 Overview

A data gathering exercise was undertaken in 2016-2017 under the guidance of the Murdi Paaki Regional Assembly to provide the evidence for major reform of the Aboriginal social housing sector in the Murdi Paaki Region. Altogether, over 1,400 households took part, including households in Ivanhoe. As well as tenants living in social housing, owners, private renters, people staying in refugees and/or were couch surfing contributed to the findings of the survey. The contribution from Ivanhoe is described below.

Housing mix (All households participating in the survey)

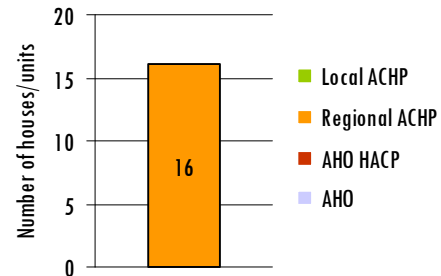


Managing organisation (Social housing tenants)

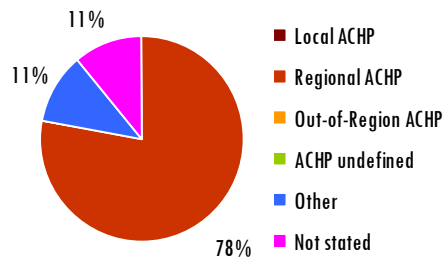


Ownership of social housing

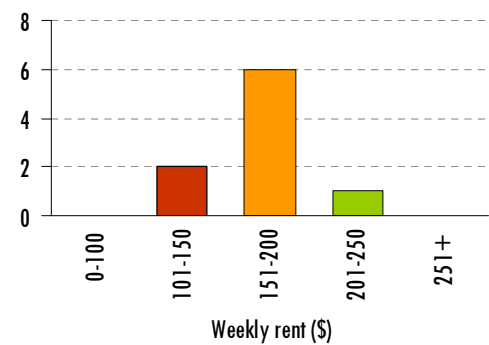
Number of housing managers = 1



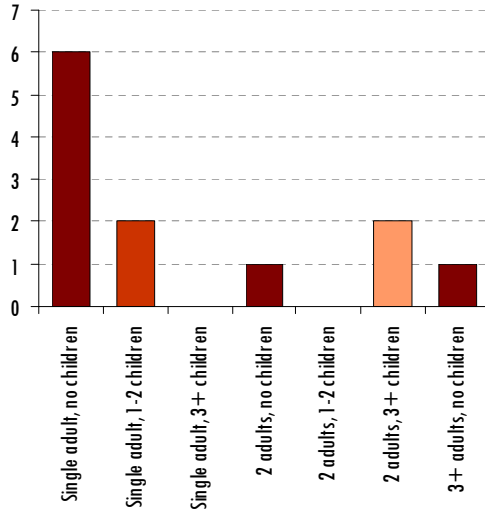
Preferred Manager (Social housing tenants)



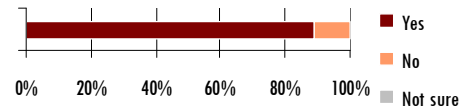
Rent levels (Social housing tenants)



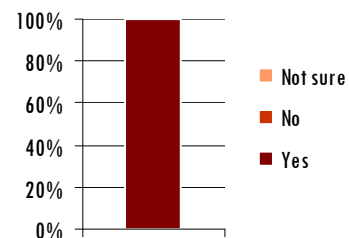
Household size (All households)



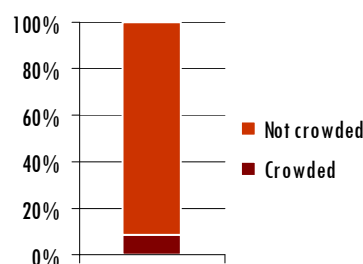
Social housing tenants claiming CRA



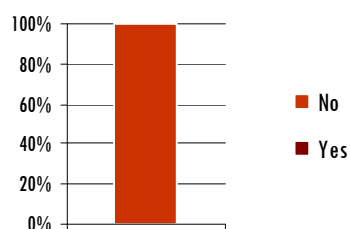
Social housing tenants with a tenancy agreement



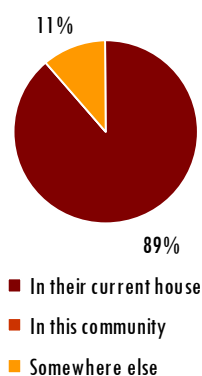
Households crowded



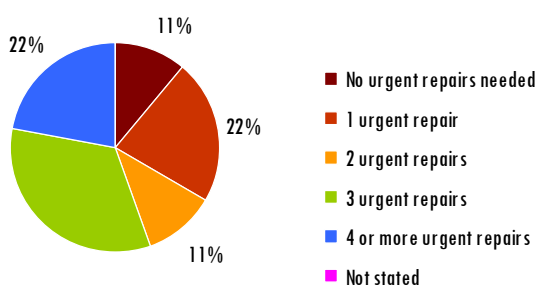
Households giving shelter to homeless people



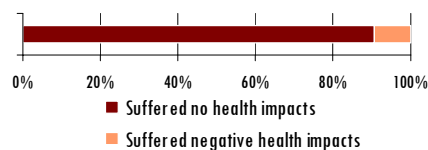
Where tenants lived 5 years ago



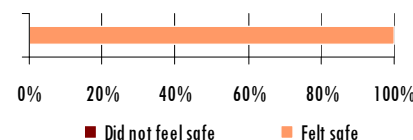
Need for urgent works (As reported by social housing tenants)



Negative impacts from living conditions



Feeling safe at home



KEY FINDINGS

- 52% (n=12) of Aboriginal households (as enumerated at the ABS 2011 Census) participated in the survey.
- Preference of social housing tenants was to retain the existing management arrangements with the Regional ACHP. The Regional ACHP managed all social housing properties in the community.
- Most households were adult only households with the majority of these being single person households. Only four households included children.
- Rent level was generally between \$151 and \$200 per week with 90% of tenants claiming Commonwealth Rent Assistance.
- All social housing tenants reported having a tenancy agreement in place.
- Enjoying low occupancy levels, tenants reported not feeling crowded. No household was giving shelter to someone who was homeless at the time.
- Almost all tenants reported a need for urgent repairs.
- All tenants reported feeling safe in their homes.
- One tenant reported negative impacts from his/her living conditions.

A more detailed discussion of survey responses is contained in the following sections of this Chapter.

5.8.2 The situation of homeowners

There are few households in Ivanhoe which own their homes. All respondent owner occupiers were satisfied with their decision to purchase. Purchases were either funded by the bank or from own savings. Advantages of owner occupation were reported to be security, and sense of achievement; no disadvantages were reported.

A number of reasons were quoted by owner occupiers for living in the community:

- They were born in Ivanhoe;
- Their family had been in the community for a long time;
- To be close to family and relations, and/or friends;
- They felt part of the local community;
- For work.

No owner occupier reported feeling crowded or was providing shelter to a person who would otherwise have been homeless.

Housing condition appeared to exhibit the same range of structural, enclosure and facilities problems as do other houses built on expansive soils in the Murdi Paaki Region.

5.8.3 The situation of tenants

The sense derived from the survey of Aboriginal social housing tenants is of a small and settled community of predominantly older female members living alone. In seven of the households, the respondent was aged 45 years or over while, in five of those households, the respondent was at least 65 years of age. Only three households had a male person present.

The weekly rent for three-bedroom dwellings was consistently higher than for four-bedroom dwellings. Tenants believed actual rents were in excess of a fair rent but renting in the Aboriginal social housing sector was the most affordable option; in fact, the only housing option available to them. About a third of respondents stated that they could not afford to buy their own home while another third was not interested in home

ownership. Evidence of financial stress was not present only one tenant reported having trouble paying their electricity bill.

At the time of the household survey, there were no young persons wanting their own accommodation nor had young persons applied for housing or were on a waiting list for a unit or house in Ivanhoe or elsewhere. None of the older persons interviewed were seeking aged accommodation or had any intention of moving although four tenants indicated they might relocate if their needs changed. Tenants were stable since only one had moved in the five years prior to the household survey and all were resident in the same house one year previously. Most tenants had lived in their houses for 10 years and longer and indicated a strong preference for their tenancies to be passed down within the family.

Crowding did not appear to be an issue as only two tenants said they were very occasionally stressed by the number of people being accommodated. No tenant was giving shelter or had given shelter to anyone homeless in the previous three years.

When assessing occupancy against the Canadian National Occupancy Standard (CNOS), at the time of the survey one dwelling exceeded the threshold criteria for additional bedrooms and required extension.

Canadian National Occupancy Standard

The Canadian National Occupancy Standard (CNOS) adopts the following criteria to determine the number of bedrooms required by a household:

1. There should be no more than 2 persons per bedroom;
2. Children less than 5 years of age of different sexes may share a bedroom;
3. Children 5 years of age or older of opposite sex should have separate bedrooms;
4. Children less than 18 years of age and of the same sex may share a bedroom;
5. Single household members 18 years or older should have a separate bedroom; and
6. Couples share a bedroom.

Later information indicates one person has applied for, been assessed and is on the waiting list for a 1-bedroom unit.

Table 5.18 sets out the number of households requiring 1, 2, 3 or 4 bedrooms to accommodate permanent residents based on household occupancy as recorded by the survey. The numbers stated do not account for visitors or family reformations.

Table 5.18: Number of bedrooms required to accommodate permanent residents only				
Size of house occupied	Number of households using			
	1	2	3	4
No of bedrooms	bedroom(s)			
3	2	3	-	1 ⁽¹⁾
4	3	0	-	0
All	5	3	-	1

Note 1: Household assessed by CNOS to require an extra bedroom

When asked about their reasons for living in Ivanhoe, tenants stated that they were either born in Ivanhoe or their families had been resident for a long time.

All tenants except one said their dwelling met their cultural needs while only one tenant stated that their accommodation impacted negatively upon their health; the reason being financial stress. It became known subsequently that a further elderly tenant required an alternative cooling system because of severe respiratory condition.

Ensuring urgent repairs and planned maintenance was scheduled and carried out competently in a timely manner was uppermost in the minds of most respondents when asked how management services could be improved. Equity in rent setting was an issue for one tenant. Four households stated a prior need for home modification and these had been completed although one stated that the wait exceeded twelve months.

Tenants did not offer any thoughts on the need for additional services in the community.

5.8.4 Aboriginal social housing assets

A method of analysis similar to that employed by the National Social Housing Survey (NSHS) conducted by AIHW (Australian Institute of Health

and Welfare 2018) has been used to characterise asset condition on the basis of information self-reported by tenants about dwelling condition, defects and facilities. The basis of this assessment is the judgment that a house is deemed to be of acceptable standard if it has no more than two major specified structural, electrical and/or plumbing problems and has at least eight working specified facilities.

Problems of a structural nature
Rising damp or water ponding under the house
Sinking/moving foundations
Uneven/sagging floors
Major cracks in wall and/or ceiling
Termite damage
Roof leaking inside
Major electrical problems
Major plumbing problems
Major air-conditioning problems
Malfunctioning on-site wastewater treatment system

In this context, facilities include those comprising 'health hardware' in the Housing for Health terminology: cooking stove and oven, bath or shower, toilet, kitchen sink, hot water heater and laundry tub plus a refrigerator and washing machine. The single divergence from the NSHS methodology adopted in this project is to increase in number of working facilities to nine through the addition of air-conditioning which MPRA considers to be essential to managing the health of residents at risk from heat, particularly children, older people and those with long term health conditions. A means of heating the home is not included.

The results of the evaluation of tenant responses is shown at Table 5.19.

Table 5.19: Social housing condition as expressed by tenants	
Condition	
No more than 2 structural problems, with 8 or more working facilities	44%
3 or more structural problems, with 8 or more working facilities	44%
None, 1 or 2 structural problems, with 7 or fewer working facilities	-
3 or more structural problems, with 7 or fewer working facilities	11%

Classification in this way might be considered somewhat arbitrary in that a single major structural problem could objectively render the dwelling uninhabitable.

The principal deficiencies recorded in the quality of social housing are noted in Table 5.20.

Table 5.20: Social housing principal structural, electrical, plumbing and facilities problems (%)	
Problem area	Houses affected
Sinking/moving foundations	78%
Cracks in wall and/or ceiling	56%
Uneven/sagging floors	44%
Roof leaking inside	33%
Non-functional facilities	
Kitchen stove	33%
Bath or shower	22%
Air-conditioning	22%

All tenants reported other minor defects such as broken windows, damaged flyscreens and the like. An inability to secure the house because entry and/or back doors could not be closed or locked was noted by a third of households. Only one household reported experiencing defects with the electrical and plumbing installations. Half of tenants stated that their rainwater tanks were not functional.

5.9 Asset condition

5.9.1 Methodology for budgeting

As discussed above, and in answer to a series of objective, closed questions, tenants reported a range of structural, building fabric and facilities defects in the household survey. Unlike the original HEHP investigations, no independent scoping of properties has been carried out to determine the scale of repairs needed to restore properties to a fully serviceable state and develop a schedule of planned maintenance.

The *Social Housing Providers and Assets Audit Report* commented on the serious omission of a requirement under the AHO Build and Grow head leasing arrangements for a managing ACHP to carry

out planned maintenance during the lifetime of the Agreement so a backlog of higher value maintenance work is to be expected.

In the absence of detailed scopes of work, this HEHP relies on an analysis of previous repair and maintenance projects to derive an 'order of probable cost'. The sample totals 121 properties spread across eight communities in the Region and includes properties requiring little or no work to those in need of major refurbishment. The sample is grouped into five bands (quintiles) of increasing scope to generate median values for each band. Properties have been allocated to a band based on the number and nature of reported faults. No adjustment of medians has been made for the average age of properties or type of construction, but values have been revised to account for remoteness as per Rawlinsons cost guide.

5.9.2 Median values

For Ivanhoe, band medians are listed in Table 5.21.

Table 5.21: Median values for property repair and maintenance, Ivanhoe	
Band	Median value (\$)
One	1,400
Two	14,560
Three	32,550
Four	55,870
Five	96,320

5.9.3 Repair and maintenance budget

Based on tenant response to the questions relating to property condition, the probable order of cost for routine repairs and maintenance is given by Table 5.22. Information about any expenditures between the time of the household survey and the preparation of this HEHP which might influence cost projections is not available.

The total number of properties requiring repair and maintenance work has been factored up in the inverse of the ratio of household survey respondents to total number of social housing properties; in the case of Ivanhoe, the factor is 17/9 or 1.89.

Table 5.22: Repair and maintenance, probable order of cost (Master Plan Strategy 5.1.1)

Band	Number of properties assessed in band from survey	Total number of properties for repair	Probable order of cost (\$)
One	1	2	2,800
Two	3	6	87,360
Three	4	7	227,850
Four	-	1	55,870
Five	1	1	96,320
Total	9	17	470,200

5.9.4 Particular works

A number of properties have been assessed as requiring individual higher cost repairs as scheduled in Table 5.23. These are additional to the estimated costs for routine repair and maintenance as identified in Table 5.22.

Table 5.23: Particular works, budget, (Master Plan Strategy 5.1.2)

Major work	Number of properties assessed	Unit cost (\$)	Probable order of cost (\$)
Replace roof covering with insulated metal roof including replacement of insulation in roof space, and gutter and downpipe replacement	3	33,000	99,000
External painting	16	7,175	114,800
Replacement of evaporative coolers	16	8,500	136,000
Total (\$)			349,800

5.9.5 Planned maintenance

The probable order of costs for repair and maintenance quoted in Table 5.22 does not allow for planned maintenance: replacement of floor coverings, kitchens, appliances and the like, for replacement of bathrooms, or cleaning of septic tanks. The need for these will be identified through scoping by the property manager and incorporated into each Property Management Plan

as part of the asset management function with due allowance for the cost of the activity.

5.10 Experiences of local government

5.10.1 Municipal rates

Central Darling Shire Council strives to provide municipal services from a very low rate base. The Shire is the largest in NSW and but has the smallest population. Rates levied in 2020/21 are shown in Table 5.24.

Table 5.24: Municipal charges (2020/21)

General rate	
Base amount	\$130.00
And variable rate based on unimproved capital value of property (currently 6.125838c/\$1.00 land value)	
Water supply service	
Properties connected:	
Raw water	\$481.00
Filtered water	\$287.00
Properties not connected:	
Raw Water	\$215.00
Filtered water	\$215.00
Water charges (Charge per kilolitre used)	
Rateable properties	
Raw water	\$1.70/kl
Filtered water	\$3.90/kl
Non-rateable properties	
Raw water	\$3.90/kl
Filtered water	\$4.70/kl
Waste management	
Domestic occupied land	\$633.00
All unoccupied land	\$300.00

Typically, a residential lot of 2,023 m² in Ivanhoe will incur a rate charge of \$170 approximately.

Households are charged a water rate (base charge) where a water service is available close to the property plus a metered per kilolitre charge for all water consumed. How much a householder pays is entirely dependent on the amount of water used. Accounts are issued on a quarterly basis.

No sewerage charges are levied since Ivanhoe properties are serviced by septic systems.

In response to a questionnaire issued at the time of the household survey, Council advised that the service charges levied for waste, water and sewerage across the Shire do not cover the cost of providing the service and the deficit is drawn from the pool of funds comprising, in part, general rates and FAGs grants.

Council advise that collection of rates is generally not problematic; they are normally paid late which incurs interest. Water consumption for some properties is an issue as usage can be extremely high and charges beyond the means of the tenant to meet.

5.10.2 Financial assistance grants

The Australian Government's grant funding is incorporated into Council's general revenue. Council advise that services provided across the Shire, including Ivanhoe, are provided on an agreed priority basis apart from those services (water, sewer, waste, street lighting, parks, reserves, public toilets, road maintenance and construction, for example) which are provided at an appropriate service level. It is Council's view that the Aboriginal community is its most significant demographic and as such benefits significantly from the services provided.

5.10.3 Involvement in Aboriginal social housing

Council reports that it has little involvement with ACHPs in respect of asset management and property inspections are not undertaken unless specifically requested. Occasional telephone contact is made with staff of the Engineering Department when problems arise. The fact that a managing ACHP does not have staff located in the community means that Council resources are often called upon to inspect and/or make safe critical deficiencies in the short term without recompense.

One issue of concern to Council is that of the impact of poorly maintained dwelling exteriors and yards on streetscape. While acknowledging that fostering a sense of civic pride is challenging with

some renters, Council suggests some effort be directed to improving the presentation of properties.

5.10.4 Council strategic interests

To a large extent, the interests of Central Darling Shire Council and the Ivanhoe community intersect. At its December 2020 Ordinary Meeting, Council flagged several areas of strategic interest which might also align with the aspirations of the Community Working Party as defined in the CAP. The areas of strategic interest are:

- Water policy;
- Local governance;
- Economic development and employment;
- Tourism;
- Health services;
- Aboriginal health, housing, education, and employment;
- Telecommunications;
- Local service provision; and
- Rural and remote location.

Council is in the process of renewing its Community Engagement Policy and, with the renewal of the CDSC Community Strategic Plan, the development of town and village plans, and preparation of strategic plans for tourism and disability inclusion, the opportunity exists for a partnership to advance the CWP's own agenda.

6 COMMUNITY HEALTH

6.1 Community health profile summary

The community of Ivanhoe is one of four larger communities in the Central Darling Shire. The Central Darling Shire is considered remote and very remote on all remoteness scales. It is one of five local government areas in the Far West Local Health District.

Quantitative data for the Ivanhoe community is not available due to its small size. A mixed-methods approach to describe the health of the community has been used.

Combined methods show that while the Aboriginal community of Ivanhoe is relatively healthy the underlying risks of poorer health are evident: risky birth outcomes, historically poorer access to educational opportunities, higher rates of admission to hospital, poorer health behaviours (like smoking and drinking) and more likely chronic condition diagnoses leading to death caused by these chronic conditions.

6.2 Health status – qualitative assessment

Qualitative evidence was gathered by interviewing local health care providers to assess the perceived health status of the Ivanhoe community. Evidence indicates that the health of the Aboriginal population is considered to be fair to good. There are few childhood illnesses and the adult population is considered to be well, with the expected burden of chronic diseases such as diabetes and heart disease.

A qualitative assessment of the Ivanhoe community finds that:

- There are only a few cases of contagious gastroenteritis each year which are managed locally and do not place a great burden on the health system;

- There are minor skin irritations, most as a result of the heat or allergic reactions;
- There is no evidence of lice, scabies or other skin infestations; and
- The elderly community experience some respiratory illness such as emphysema and chronic airways disease but this is mostly attributed to smoking.

In 2019, 71.7% of Far West LHD residents who participated in the annual NSW Population Health Survey reported excellent, very good, or good health¹.

6.3 Health status – quantitative assessment

Data for the Central Darling Shire, Far West Local Health District, the region covered by Maari Ma Health Aboriginal Corporation and NSW as a whole is presented to describe the health status of the population.

6.3.1 Mother and baby health²

In far western NSW, compared to all women

- There is a higher proportion of younger Aboriginal women aged 10-19 having a baby;
- More Aboriginal women are having their first antenatal visit early;
- Aboriginal women are almost 10 times more likely to smoke during pregnancy;
- Aboriginal women are almost 4 times more likely to have a baby with a low birthweight (<2,500g); and
- Aboriginal women are 3 times more likely to have a baby prematurely (<37 weeks gestation).

6.3.2 Growth and development of children and young people²

In far western NSW, compared to all children

- There is a higher proportion of Aboriginal children who are fully immunised at 9 months and again at 5 years;

- The percentage of Aboriginal 4-year-old children attending preschool has increased by 16% in the last 5 years;
- Aboriginal children in year 5 are 2 times more likely to have a lower standard of reading assessment in the NAPLAN test; and
- Almost 40% of Aboriginal young people who complete year 10 stay at school until they are in year 12 – an increase of almost 5% in the last 5 years.

6.3.3 Morbidity

- Compared to all Aboriginal people in Australia, Aboriginal people in the Broken Hill and Far West SA3 are significantly more likely to present to the Emergency Department for all reasons. Overall Aboriginal people in the Broken Hill and Far West SA3 are almost two times more likely to present to the Emergency Department compared to all Aboriginal people in Australia (109,107.6 per 100,000 people compared to 62,109.4 per 100,000 people)³.
- In 2016/17 there were, on average more than 12,000 admissions to hospital by Far West LHD residents, of whom 17% were Aboriginal people, who form 11% of the total LHD population.⁴
- The leading cause of admission for Aboriginal people in the Far West LHD is dialysis (45%) then injury and poisoning (7%) and respiratory disease (7%).⁴
- The proportion of Aboriginal people in the Far West LHD admitted to hospital for dialysis is more than the three times that of the proportion expected on the basis of comparison with the NSW Aboriginal population.⁴
- Compared to all Aboriginal people in Australia, Aboriginal people in the Broken Hill and Far West SA3 are significantly more likely to be admitted to hospital for eye diseases, asthma and chronic airways disease. There are significantly fewer admissions for infectious and parasitic diseases, endocrine, nutritional and metabolic disease, nervous system diseases, heart failure, skin diseases, musculoskeletal diseases, urinary diseases, chronic kidney disease (which is different to dialysis), childbirth and babies with malformations³.

- Conversely, the admission rate for all people in the Far West LHD for skin infections is significantly higher than the rate in NSW (569.4 per 100,000 people compared to 355.3 per 100,000 people).⁵
- The rate of potentially avoidable admissions in the Central Darling Shire is significantly higher than in NSW (2,977.0 per 100,000 admissions compared to 2,160.7 per 100,000 admissions)⁶.
- The leading cause of potentially avoidable admission in the Far West LHD is iron deficiency anaemia followed by chronic airways disease (COPD) and cellulitis.
- Aboriginal people in Broken Hill and Far West SA3 are significantly less likely to be admitted to hospital for a potentially preventable condition compared to all Aboriginal Australians (4,896.0 per 100,000 people compared to 5,395.2 per 100,000 people)³.

6.3.4 Mortality

- In 2018 there were 298 deaths of people who lived in the Far West LHD. For people who lived in the Far West LHD, the all causes death rate was significantly higher than the rate for all of NSW (634.6 per 100,000 people compared to 506.4 per 100,000 people)⁷.
- For all Aboriginal people in the Broken Hill and Far West SA3 the median age at death is 64.0 years compared to 61.0 years in NSW³. By comparison the median age at death for all people who live in the Central Darling Shire is 63.0 years compared to 82.0 years for all NSW residents⁸.
- The leading cause of death for all Aboriginal people in NSW is circulatory disease (189.0 per 100,000 population) which is significantly higher than the rate of circulatory disease death in all of NSW (144.6 per 100,000 population)⁹.
- In contrast, in the Far West LHD the leading cause of death is malignant cancers (27.6% of all deaths)¹⁰.
- In the Central Darling Shire in 2016-2018 the death rate from injury and poisoning was significantly higher than in NSW (54.2 per 100,000 population compared to 35.6 per 100,000 population)¹¹.

- In NSW 6.9% of all deaths in outer regional and remote areas are due to injury and poisoning and 1.5% are due to infectious and parasitic diseases¹².
- The rate of potentially avoidable deaths in the Central Darling Shire is significantly higher than in NSW (128.1 per 100,000 population compared to 99.4 per 100,000 population)¹³.
- Aboriginal people in Broken Hill and Far West SA3 are significantly more likely to die prematurely from respiratory diseases compared to all Aboriginal Australians (83.3 per 100,000 people compared to 69.8 per 100,000 people)³.

proportion of at-risk drinkers in NSW was 32.8%¹⁵.

6.3.6 Healthy living practices

- Housing for Health data across the 16 NSW Aboriginal communities who participated in 2018/19 to 2019/20 shows that after initial inspection and fix, 8 of the 11 indicators of 'Healthy Living Practices' had increased to above 97% fully met¹⁶.

Tables 6.1 to 6.5 and Figure 6.1 provide detailed information of the health statistics for the region.

6.3.5 Health risk factors

- In NSW 26.4% of the Aboriginal population smoked cigarettes daily. In the Far West LHD this proportion was 18.6%; by comparison the proportion of smokers in NSW was 11.2%¹⁴.
- In NSW 48.7% of the Aboriginal population drank alcohol at levels that posed a long-term risk to health. In the Far West LHD this proportion was 38.3%; by comparison the

Table 6.1: Cause of presentation to Emergency Departments, all Aboriginal people, rate per 100,000, Far West SA3, NSW and Australia 2015/16-2017/18

	Far West SA3	NSW	Australia
All causes	109,107.6*	71,135.8	62,109.4
Infectious and parasitic disease	4,939.8*	3,393.1	3,293.9
Mental health and related conditions	5,127.4*	3,649.3	3,636.7
Circulatory system diseases	2,242.0*	1,274.2	1,570.1
Respiratory system diseases	12,178.5*	7,153.7	6,340.7
Digestive system diseases	6,273.1*	3,972.5	3,500.8
Musculoskeletal system diseases	5,710.7*	3,936.2	2,910.1
Urinary system diseases	3,037.5*	2,364.4	2,263.4
Injury, poisoning and external causes	27,940.2*	16,420.0	14,458.8
Other factors requiring contact with the health system	5,660.1*	5,889.1	4,664.0
Other reasons	36,081.0*	23,097.0	19,471.0

* Significantly higher than the rate for Australia

Data source: Aboriginal and Torres Strait Islander Social Health Atlas of Australia.
Public Health Information Development Unit, Torrens University Australia

Table 6.2: Leading cause of admission for Aboriginal people, FWLHD, 2016-17

	% admissions: Aboriginal people in FWLHD	All NSW Aboriginal % admissions	All NSW % admissions
Dialysis	45%	27%	13%
Injury & poisoning	7%	7%	7%
Respiratory diseases	7%	7%	5%
Maternal, neonatal & congenital disorders	7%	10%	7%
Digestive system diseases	6%	7%	10%
Mental disorders	6%	5%	5%
Symptoms & abnormal findings	4%	7%	8%
Other factors infl. health	4%	7%	11%
Circulatory diseases	3%	3%	5%
Nervous & sense disorders	2%	4%	7%
Genitourinary diseases	2%	4%	5%
Skin diseases	2%	2%	2%
Musculoskeletal diseases	2%	3%	5%
Endocrine diseases	1%	2%	2%
Infectious diseases	1%	2%	2%
Malignant neoplasms	1%	2%	4%
Other neoplasms	1%	1%	2%
Blood & immune diseases	0%	1%	1%
Other causes	0	1%	0%

Data source: NSW CAPED, ABS (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health

Table 6.3: Cause of admission, all Aboriginal people, rate per 100,000, Far West SA3, NSW and Australia 2015/16-2017/18

	Far West SA3	NSW	Australia
Infectious and parasitic disease	716.2 [#]	759.9	1,093.5
All cancers	1,005.0	926.1	983.8
Endocrine, nutritional and metabolic diseases	733.8 [#]	704.9	1,101.0
- Diabetes	334.4	319.0	420.9
Mental health and related conditions	2,598.3	2,515.3	2,626.5
- Mood affective disorders	373.2	351.3	355.6
Nervous system diseases	638.0 [#]	807.1	916.5
Eye and adnexa diseases	696.8 [*]	465.4	531.6
Ear and mastoid process diseases	317.0	336.1	423.4
Circulatory system diseases	1,830.6	1,389.5	1,822.7
- Ischaemic heart disease	791.5	473.7	652.8
- Heart failure	126.0 [#]	163.4	238.4
Respiratory system diseases	3,551.2	2,659.0	3,373.8
- Asthma	487.1 [*]	280.6	300.4
- Chronic Obstructive Pulmonary Disease (COPD)	947.2 [*]	548.3	594.9
Digestive system diseases	3,141.6	2,843.6	3,099.5
Skin diseases	1,031.7 [#]	821.0	1,370.0

	Far West SA3	NSW	Australia
Musculoskeletal system diseases	933.2 [#]	1,415.0	1,446.0
Urinary system diseases	1,087.7 [#]	1,460.8	1,696.2
- Chronic kidney disease	57.6 [#]	252.7	387.3
Pregnancy and childbirth	10,411.5 [#]	12,749.2	14,700.7
Congenital conditions	109.5 [#]	215.0	210.3
Injury, poisoning and external causes	4,264.7	3,305.9	4,364.1

* Significantly higher than the rate for Australia

[#] Significantly lower than the rate for Australia

Data source: Aboriginal and Torres Strait Islander Social Health Atlas of Australia, Public Health Information Development Unit, Torrens University Australia

Table 6.4: Leading cause of death, FWLHD and NSW, 2018-19

	FWLHD			NSW	
	Ave # deaths per year	Rate per 100,000	% deaths	Aboriginal % deaths	Total % deaths
Malignant cancers	86.0	179.0	27.6	25.3	28.3
Circulatory diseases	65.0	130.2	20.8	21.8	27.6
Respiratory diseases	32.5	70.4	10.4	11.6	9.8
Mental and behavioural disorders	29.5	56.9	9.5	6.7	6.9
Endocrine diseases	22.5	44.2	7.2	6.4	4.2
Injury and poisoning	76.5	192.7 ^a	24.5	13.6	5.9
All other causes				14.6	17.3
All causes	312	673.5			

Data source: NSW COC URF, ABS (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health

Table 6.5: Premature deaths, Aboriginal people aged 0-74 years, rate per 100,000, Far West SA3, NSW and Australia 2013-2017

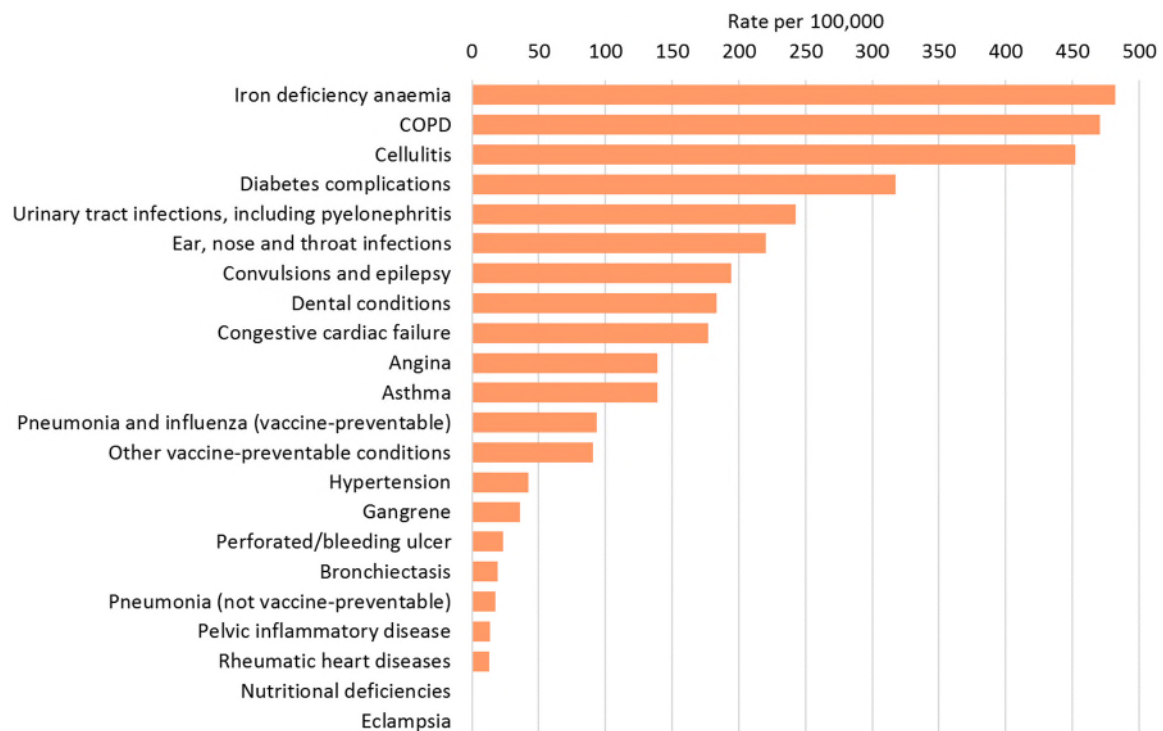
	Far West SA3	NSW	Australia
Deaths from cancer	97.4	56.3	72.1
Deaths from diabetes	37.6	10.0	23.4
Deaths from circulatory system diseases	88.2	46.1	69.8
Deaths from respiratory system diseases	83.3 [*]	22.4	26.9
Deaths from external causes	55.7	41.5	58.1

* Significantly higher than the rate for Australia

Data source: Aboriginal and Torres Strait Islander Social Health Atlas of Australia, Public Health Information Development Unit, Torrens University Australia

^a Due to small numbers the data for deaths due to 'injury and poisoning' in the Far West LHD has been combined with 'other causes'. Injury and poisoning deaths data for the Local Government Area is included in the text.

Figure 6.1: Potentially avoidable admissions (rate per 100,000), total population FWLHD, 2018-19



Data source: NSW CAPED, ABS (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health

6.4 Available health services

Ivanhoe Health Service is a Primary Health Care facility and outpatient clinic. It is open Monday to Friday 8.30am-5.00pm. There is always a registered nurse on call for emergencies outside the normal opening hours.

Health services in Ivanhoe are provided by the Far West LHD, Royal Flying Doctor Service, Maari Ma Health Aboriginal Corporation, Western NSW Primary Health Network (PHN) and some other, standalone providers.

The Far West LHD provides:

- Registered nurses;
- Administration support;
- Transport, security and domestic services;
- Access to allied health from Broken Hill on request; and
- Access to medical specialists (in Broken Hill).

The RFDS provides:

- GP (doctor);
- Dentist;
- Medical specialists (dermatology, ophthalmology, ENT);
- Allied health (audiology);
- Mental health workers;
- Aboriginal health worker;
- Alcohol and other drug workers;
- Child and family health nurse; and
- Diabetes / Chronic disease worker

Maari Ma provides:

- GP (specialising in Aboriginal Health and Chronic Disease care);
- Medical specialists (endocrinology, renal medicine, cardiology, ENT, psychiatry, pain medicine, respiratory medicine, echocardiography, smoking cessation);
- Dietitian;
- Child dental;

- Aboriginal Health Worker trainee; and
- Transport

The Western NSW PHN provides:

- Podiatry (from University of South Australia).

Other, standalone providers include:

- Optometry (from Brian Holden Vision Institute).

7 HUMAN SERVICES

7.1 Human services in the community

The sectors of the population which will be the target of human services are identified in Table 7.1 together with the corresponding population. The figures are for 2016.

Table 7.1: Service age groups			
Total persons (Usual residence)			
Service age group (years)	Aboriginal	Non-Indigenous	Not stated
Babies and pre-schoolers (0-4)	0	3	3
Primary schoolers (5-11)	6	5	3
Secondary schoolers (12-17)	0	7	4
Tertiary education and independence (18-24)	0	7	6
Young workforce (25-34)	11	20	3
Parents and homebuilders (35-49)	15	15	7
Older workers and pre-retirees (50-59)	10	20	9
Empty nesters and retirees (60-69)	6	11	9
Seniors (70-84)	4	8	7
Elderly aged (85 and over)	0	0	0
Source: ABS Tablebuilder with age classifications as .id Consultants			

No Aboriginal respondents to the 2016 Census reported a need for assistance with core activities, and none indicated that they were providing unpaid assistance to a person with a disability; however, there was a high non-response rate for both questions (over 40%). The mean core activity need for assistance for the Murdi Paaki Region was 7%.

Human services available to the Aboriginal community are shown at Table 7.2 and perceptions about the performance and adequacy of these services, as identified by the community, are described at Table 7.3. Services tend to be utilised by both the Aboriginal and non-Indigenous communities.

7.2 Community services and facilities

Community services and facilities in Ivanhoe are few. Apart from the community services organised and/or delivered through the Central School, little else exists to cater for either the young or adult population. Services that do exist are mainly for the older cohort of the population and are co-ordinated through the Ivanhoe Multi Service Outlet: meals on wheels, Centrelink assistance,

aged care referrals and weekly medical transport, and are in high demand.

Ivanhoe residents have access to the in-ground open air swimming pool, a community hall, a sports/football oval and the showground. The Ivanhoe Youth Centre, located opposite the school, offers a range of youth activities supervised by the local police officers.

An occasional rodeo and gymkhana is held at the Ivanhoe racecourse reserve but the community advise that access is currently restricted as the site is being used as a stockyard.

The community does have an Aboriginal organisation able to lead human services development initiatives in the Ivanhoe Local Aboriginal Land Council but the organisation is not able to drive implementation of community aspirations.

Table 7.2: Human service providers and service mix

Aboriginal Community Controlled Service		Aboriginal-identified service		Mainstream service	
Murdi Paaki Services Ltd	TS	Nil		NSW Health HealthOne	HS
Murdi Paaki TSEP				Accident and emergency health care	
All Aboriginal social housing tenants				All Ivanhoe community members	
Maari Ma Health Aboriginal Corporation	HS			Royal Flying Doctor Service	HS
Primary health care				Primary health care, patient evacuation	
All Aboriginal community members				All Ivanhoe community members	
				NSW Police Service	OHS
				Public safety	
				All Ivanhoe community members	
				Ivanhoe Central School	ED
				School education K-12	
				All Ivanhoe community members	
				Central Darling Shire Council	OHS
				Ivanhoe Multi Service Outlet (MSO)	
				Centrelink, food relief and general support	
				Uniting Home Care Far West	IHC
				In-home care	
				All Ivanhoe community members eligible	
				LiveBetter Community Services	IHC
				Transport, in conjunction with MSO	
				All Ivanhoe community members eligible	

C Crisis accommodation
 S Short term accommodation
 Me Medium term accommodation
 L Long term accommodation

TS Tenancy support service
 HR Housing-related human service
 TS HR

OHS Other human service
 ED Education and training

Table 7.3: Human service providers and service mix: performance and adequacy

Human service expected	Performance and adequacy of human services received	Measures to bring about improvement
Home care services for the elderly and those with a disability	Service is inadequate. There is currently no in-home care service available to the elderly because of resourcing issues	Place greater reliance on community collective care in service design, with cultural safety to be at the forefront of service delivery
Well maintained and safe social housing at affordable rent with greater emphasis on accommodation for single people and small families	Use of existing assets is not efficient Maintenance of existing assets is infrequent, generally of limited scope, and not to expected standard Home modification services are required but not forthcoming Existing houses are energy intensive and contribute to household poverty and poorer health conditions	Implement the HEHP Master Plan Improve communication between the housing manager, CWP and tenants Urgently schedule ACAT inspections to assess the need and scope of home modifications Install rooftop solar to reduce energy costs
Youth services for older children and young adults	Access limited to once a week with few activities and programmes. Service survives through the voluntary contribution of the local police officer	Provide greater accessibility and activity/programme mix Negotiate for the creation of a motocross park at the racecourse
Access to legal services	Nil	Install private video-conferencing facility at the MSO
Employment services to assist with training, job placement and employment support services and networks	Nil, no service from REDIE	Increase placement of local Aboriginal workers with CDSC Focus on growing skills in the construction sector Continue driver training courses Create an Aboriginal business base in the human services sector, initially to provide home care services
Transport services (other than MSO/LiveBetter bus)	Nil	Negotiate for the health service to provide transport services at a greater frequency than weekly to allow community members to access shops and social activities in major centres as well as to attend for medical appointments

8 COMMUNITY PERSPECTIVES

8.1 Community priorities

8.1.1 Framework for progress

The Ivanhoe CWP, in common with all other CWPs, updated its Community Action Plan (CAP) (2019) to inform external agencies of the priorities of the Ivanhoe Aboriginal community and to provide the foundation for improved services across the full spectrum of health and human services. The CAP is in preliminary form pending negotiation of practical strategies to apply to stated objectives. Together with feedback through community consultation, the CAP informs the proposals for service improvement set out in this HEHP.

It should be noted that a formal Engagement Protocol exists at Regional level to guide interactions between agencies, CWPs and broader Aboriginal community and this protocol is to be observed in addressing CAP aspirations.

At a service level, relationships with NSW Government agencies are paramount and the CWP is firm in its expectation that the following key principles drawn from the Murdi Paaki Local Decision-Making Accord Mark II will be honoured:

- Aboriginal leaders and Elders understand their own community needs, and have the drive and ability to develop their own solutions (2.1.2);
- Regional and local solutions for regional and local problems, with ideas and help from outside when, where and in the form in which requested (2.1.5);
- A genuine commitment on the part of government and community to developing transformative rather than transactional relationships, with a renewed focus on developing innovative and holistic solutions and on considering different, more equal approaches to partnership (2.1.10); and
- Optimising returns on investment through better targeted, more efficient, effective and equitable forms of programme and service delivery (2.1.11).

8.1.2 Community Action Plan

The Ivanhoe CWP has identified four priority areas for action and specific goals and strategies are stated in the CAP. All areas are weighted equally in their importance to the community. Of these priority areas, all are relevant to this Plan:

- Children and young people: Improved well-being of children and young people by provision of better facilities for children and for young people's development and well-being in Ivanhoe;
- Elderly: Improved wellbeing through better care, housing and social services for older people;
- Health and wellbeing: Improved community social and emotional wellbeing through increased health literacy and participation in lifestyle programmes;
- Culture and heritage: Development of a multi-purpose Cultural Centre in Ivanhoe which is available to be used for a range of purposes.

Also relevant is longer term Goal 2 which aspires to see 'Our people ... comfortably and safely housed in homes which are free from overcrowding and are well maintained and have facilities which lessen the impacts of the Ivanhoe climate' while Goal 3, with an environmental focus, seeks to 'Improve our local infrastructure so there is access to high quality drinking water, clean air, unpolluted surroundings and attractive green and public spaces'.

This HEHP sits alongside the CAP in addressing the principal action areas identified by the Ivanhoe community which are common to the objectives of both strategic documents.

8.2 Community view

8.2.1 Human services generally

Of greatest concern to the Ivanhoe community is the inadequacy of services for young people and to the elderly. Ivanhoe has a Youth Centre which is open one day a week. Activities are organised on a voluntary basis by one of the local police officers who is due to take up another posting shortly. The

CWP is requesting that a full-time Youth Coordinator be employed to provide support to young people, design, coordinate and run sporting and social events, and act as a broker for skills development.

In-home care services to older people and people with a disability have been discontinued for the time being because of staffing difficulties. It is not known how many Aboriginal residents have been granted aged care packages and will be badly affected by this service lapse but the CWP has indicated it is far from pleased with a service framework which fails to deliver on behalf of the most vulnerable in the community. The only support that is available is a weekly transport service for shopping and medical appointments, coordinated through the Multi-Service Outlet. It is of note that the nearest centre of any size is Hay, over a two-hour drive away, one way.

There is no appetite for separate Aged Care units since elderly residents prefer to stay in their homes and accommodate visiting family members. The nearest aged care beds are at Wilcannia Hospital but previous research has shown that Ivanhoe residents will not take up a Wilcannia aged care place because of distance and isolation. There are no Ivanhoe residents in care at Wilcannia at the time of writing.

A solution proposed by the CWP is to place greater reliance on community collective care, with cultural safety at the forefront of service delivery. The matter of care for older people is a pressing issue and likely only dealt with through establishing a Regionally based Aboriginal aged care provider able to place a resident worker in each community. The inclination of government funding agencies to favour non-Indigenous faith-based human service providers has whittled away Aboriginal community-controlled services based in the Region over time to the detriment of service quality, acceptability and effectiveness. The CWP identifies this as a broader issue to be managed at Regional level.

An employment service has not been present in the community since REDI.E withdrew from the community some years ago, taking with it the

resident coordinator and vehicle. In consequence, there is no opportunity for skills development within the community, nor for employment along the lines of the old CDEP. The CWP has identified a cultural centre as offering a focus in the short-term for rebuilding a business base within a community with the barest minimum of commercial activity. An opportunity may exist for a handyman-type role with the newly formed MPRHBC but this remains to be investigated. Re-establishing a link with REDI.E would be an obvious step in restoring this service as would access to the Birrang learner driver courses which equipped young people with the means to travel for employment purposes.

8.2.2 Housing services

Community advice in respect of housing and housing related services centred on the need to:

- Maintain existing properties in acceptable condition, improving thermal performance where possible;
- Organise home modifications for Elders and people with a disability, including rectifying non-complying work carried out to ramps and steps;
- Involve the community in design changes to existing houses and/or any new housing which might be built; and
- Consider flats for single people and small families.

These issues are the subject of a more detailed discussion in Chapter 5 and the Master Plan, Chapter 10.

9 ENVIRONMENTAL HEALTH INFRASTRUCTURE

9.1 Infrastructure asset schedules

INFRASTRUCTURE ASSET SCHEDULE				
9.1 WATER SUPPLY		Responsible Authority: Central Darling Shire Council		
Location: Ivanhoe				
Baseline Data				
For Central Darling as a whole (2018-19)		Weighted median for NSW as a whole		
Water supplied - Residential: 285 ML		Water supplied - Residential: 4,123 ML		
Average annual residential water supplied (potable): 542.88/kL/prop		Average annual residential water supplied (potable): 159.6/kL/prop		
Peak day water supplied: 1,360 L/d/prop		Peak day water supplied: 1,300 L/d/prop		
Average daily consumption over peak week (ML/d) divided by average daily consumption: 87.11%		Average daily consumption over peak week (ML/d) divided by average daily consumption: 143.27%		
Water quality complaints: 32.74/1,000 properties		Water quality complaints: 2.68/1,000 properties		
Works	Item	Specification	Condition	Comments
Headworks	River water inlet	Supply from Willandra Creek at Hillston. Transfer by 100km regulated channel to gated side channel overflow to head pond via silt trap	✓	Head pond (Morrison’s Tank) capacity is 400 ML Town storage dam 30ML
	Boreholes	Five boreholes located at Tooralee equipped with submersible pumpsets	✓	Bore field located 32 km south east of Ivanhoe
Treatment	Treatment plant - potable	Conventional coagulation, settlement, filtration, chlorination, pH correction Activated carbon for algal outbreaks	X	Manually operated plant built in mid-1980’s. Capacity 0.5 ML/d Max recorded flow is 0.2 ML/day 300m3 ground tank Water quality monitored Blue green algae managed by WTP
	Treatment plant - raw	Chlorination	X	
Storage	Potable storage Raw water storage	Circular standpipe steel tanks, 25 m high	✓	Capacity 0.5 ML Capacity 1.0 ML
Distribution	Reticulation	Separate raw and potable systems, DN200/100 mains with hydrants at least 90m spacing	✓	CI and uPVC mains
	Services	Raw and potable connections metered	✓	
Item	Strategy Ref	Proposed Action		Estimated Cost
Treatment	-	Design and construction of a new water treatment plant (WTP) has commenced		\$2.5M
		No other action required		

INFRASTRUCTURE ASSET SCHEDULE				
9.2 SEWERAGE		Responsible Authority: Central Darling Shire Council		
Location: Ivanhoe				
Works	Item	Specification	Condition	Comments
On-site Treatment	Septic tanks	Concrete and grp tanks of 1,800L to 2,200L capacity.	✓	-
	Absorption trenches	Gravel filled absorption trench sections with IOs at inlet and termination	✓	-
Item	Strategy Ref	Proposed Action		Estimated Cost
		No action required		-
Performance standard				
Design Standards: On-site sewage management for single households, 1998, NSW Health et al, AS/NZS 1546.1 – 2008 and AS/NZS 1547 – 2012				

INFRASTRUCTURE ASSET SCHEDULE			
9.3 STORMWATER DRAINAGE		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	Comments		
GENERAL DESCRIPTION:			
Trunk drainage	<p>Developed areas are flood free except that localised flooding of Cobar Road and other arterials can occur in exceptional events. There is no piped trunk drainage in town apart from culvert road crossings. Roads are drained by table drains, draining to retention basins to the south of town. Flows in the John Street area discharge overland to bush at the western end of town.</p> <p>Most of Columbus Street, and the intersections with Kennedy and Cook Streets, are provided with kerb and gutter. The section of Leichardt Street fronting the swimming pool is also provided with kerb and gutter. Nuisance flooding occurs at the lower end of Columbus Street due, in part, to the formation of access ramps across flow paths.</p> <p>A trapezoidal interceptor drain diverts overland flows arriving at the northern edge of town to bush on the western side of town. A drainage easement has been created to accommodate the works.</p>		
Local drainage	<p>The CWP reports large bodies of water pond collecting in table drains fronting Columbus Street properties and over driveway crossings hampering access from the highway. Nuisance flooding occurs in the back yards of the Columbus Street properties; overland flows arriving via the rear laneway.</p>		
Item	Strategy Ref	Proposed Action	Estimated Cost
	9.4.1	Negotiate with CDSC to provide kerb and guttering to the full length of Columbus Street and in other locations where access is hampered by stormwater ponding (Refer also to 9.5)	-

INFRASTRUCTURE ASSET SCHEDULE			
9.4 ROADS AND DRAINAGE		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	Comments		
GENERAL DESCRIPTION:			
Internal roads	Sealed carriageway, 6.0 m surfaced width with graded gravel shoulders		
Speed limit	50 km/hr		
Black spots	Nil		
Item	Strategy Ref	Proposed Action	Estimated Cost
		No action required	-

INFRASTRUCTURE ASSET SCHEDULE			
9.5 ENVIRONMENTAL AMENITY		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	Comments		
GENERAL DESCRIPTION:			
Streetscape	Extensive streetscape plantings to all streets comprising flowering gums in grassed verge. Mature pepper trees in commercial area. Remnant vegetation elsewhere and low canopy bush on outskirts Unvegetated friable soils readily air-borne when disturbed in all areas but particularly at northern end of Columbus Street. Ground covers are present where table drains are formed or irrigation occurs.		
Public spaces	Oval to east of town has an irrigated grass surface.		
Dust	Dust is raised by vehicles crossing the nature strip to the north of Columbus Street, the nature strip to the northern end of Raleigh Street, driving in all back laneways and unformed unsealed roads. Seal stops at the eastern edge of town and surface is gravel beyond. Refer also to Section 3.8 and 3.11.		
Air quality	There are no issues reported.		
Item	Strategy Ref	Proposed Action	Estimated Cost
Streetscape		No action required	-
Public spaces		No action required	-
Dust	9.5.1	Provide hard-surfaced driveway strips to all dwellings, constructed to allow access to dwellings in periods of wet weather (Refer to 9.3).	\$44,000
	9.5.2	Provide shade plantings to property boundaries to encourage self-mulching of soils.	\$33,000
Air quality		No action required.	

INFRASTRUCTURE ASSET SCHEDULE			
9.6 FIRE CONTROL		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	Comments		
GENERAL DESCRIPTION:			
Service	Central Darling Shire Council Fire Control Officer based in Wilcannia is the only salaried position. Service staffed by volunteers under a volunteer Brigade Captain. All positions filled.		
Fixed plant	Hydrants located in town. Hydrants are reported to be operable. Mains pressure adequate to supply at pressure greater than atmospheric in town.		
Mobile plant	Two appliances garaged in Behring Street. Third appliance located at Railtown. Unit fully operational.		
Item	Strategy Ref	Proposed Action	Estimated Cost
		No action required.	-

INFRASTRUCTURE ASSET SCHEDULE			
9.7 POWER AND STREET LIGHTING		Responsible Authority: Essential Energy	
Location: Ivanhoe			
Works	Comments		
GENERAL DESCRIPTION:			
Service	Lengthy 33kV feeder from Hillston to 33/11kV zone substation in Ivanhoe. Pole mounted cabling distributed throughout developed area of town; LV distributed as single and three phase power.		
Connection	All dwellings are connected via aerial cabling.		
Outage	Frequency and duration not known.		
Street lighting	Pole mounted luminaries.		
Item	Strategy Ref	Proposed Action	Estimated Cost
		No action required.	-

INFRASTRUCTURE ASSET SCHEDULE			
9.8 COMMUNICATIONS		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	COMMENTS		
GENERAL DESCRIPTION:			
Digital service	Telstra 4G service with a 15 km range from the centre of Ivanhoe		
Public call box	One located on Highway at Post Office		
NBN	Sky Muster satellite service		
TV satellite	Digital TV broadcast tower, Balranald Road		
Item	Strategy Ref	Proposed Action	Estimated Cost
		No action required	-

INFRASTRUCTURE ASSET SCHEDULE			
9.9 SOLID WASTE DISPOSAL		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	COMMENTS		
GENERAL DESCRIPTION:			
Collection	Local Authority kerbside service collecting from household Sulo bins and street bins.		
Disposal	Single cell trench located to east of town outside of developed area.		
Recycling	Nil.		
Clean up	Budgeted.		
Safety	Compound is fenced but open.		
Item	Strategy Ref	Proposed Action	Estimated Cost
		No action required.	-

INFRASTRUCTURE ASSET SCHEDULE			
9.10 ANIMAL CONTROL		Responsible Authority: Central Darling Shire Council	
Location: Ivanhoe			
Works	COMMENTS		
GENERAL DESCRIPTION:			
Domestic pets	Stray dogs present a risk. Owners can voluntarily surrender animals to CDSC for rehoming or to be euthanised. A veterinary service is available to low income households for animal desexing and disease management.		
Item	Strategy Ref	Proposed Action	Estimated Cost
		No action required.	-

9.2 Infrastructure developments

As noted in Section 3.11, Tronox propose to develop the Ivanhoe rail yards for the transshipping of mineral sands concentrate to Broken Hill for processing and, in time, the handling of returning waste material. The environmental assessment indicates that increased mineral concentrate haulage and handling will increase air quality emissions. Monitoring of air quality over a 5-month period by Tronox recorded levels more than 50% above the annual average PM₁₀ criterion of 25 µg/m³ probably due to windblown dust. This finding (Department of Planning, Industry and Environment [DPIE], Atlas-Campaspe Mineral Sands Mine Optimisation [MOD 1], State Significant Development Modification Assessment [SSD 5012 MOD 1]) echoes that touched on in Section 3.8: that fine particle pollution is a matter of concern. Tronox proposes to water the access road and stockpiles with water from a site bore which is stated to reduce emissions at the yard by 15% overall, compared to the approved operations. Given the prevailing afternoon wind in Ivanhoe is from a southerly direction, a potential risk exists to town residents. The existing DustWatch monitoring station at Kilfera Station is not positioned to record dust events in the town so this HEHP suggests that, if dust from the development becomes an issue, then the CWP request DPIE to instruct Tronox to establish a monitoring station in town.

Other impacts such as traffic and noise pollution are not considered to present adverse impacts.

9.3 Infrastructure improvements

Residents of Ivanhoe have the benefit of a full range of municipal services, except that Ivanhoe is not sewered. The nature and extent of each service has been investigated and analysed where appropriate to determine the current level of serviceability and compliance with environmental health standards. Suggested improvements are listed at Table 9.11.

Table 9.11: Proposed infrastructure improvements		
Infrastructure element		
Roads and drainage		
9.4.1	Negotiate with CDSC to extend kerb and guttering	-
Environmental amenity - Dust		
9.5.1	Provide hard-surfaced driveway strips to individual dwellings	\$44,000
9.5.2	Provide shade plantings to property boundaries	\$33,000

Environmental health infrastructure services in the town are the responsibility of Central Darling Shire Council, Essential Energy or Telstra, as relevant. No infrastructure elements are owned, operated or maintained by any local Aboriginal community organisation.

10 MASTER PLAN

10.1 Cultural influences on decision-making

The NSW Aboriginal Housing and Infrastructure Programmes Implementation Manual, an initiative of MPRA and the NSW Department of Aboriginal Affairs (as was) flowing from the successful Australian Government National Aboriginal Health Strategy (NAHS) projects, written in 1999, placed the concept of effective community management of capital works and associated housing and infrastructure projects onto a practical footing. CWP, working with a community-selected Project Manager, had demonstrated ample capacity to set community objectives, and to control and co-ordinate overall programme delivery on behalf of, and in the best interests of, their communities, and the agreed negotiated system of rules governing projects roll out was formal acknowledgement of the ongoing position of CWP as the local decision-making body. The Regional and local governance structures remain in place and CWP are still well positioned to bring their local knowledge and cultural perspectives to inform the shape and substance of housing and infrastructure developments. This Master Plan evidences this decision-making in practice.

10.2 Development proposals

From the investigations and consultations carried out, the need for significant new development at Ivanhoe has not been established. There is no waiting list for social housing in the community; MPRHC advise that it has been difficult to find tenants to fill vacancies at times. With little prospect of increased employment opportunities, further demand for social housing is not expected to materialise in the future.

The Aboriginal population of Ivanhoe is relatively stable and aged; the median is calculated to fall between 35-39 years compared with 26 years for the Murdi Paaki Region as a whole. In consequence, a priority of the CWP is to ensure that existing properties are in a safe, maintained and healthy condition for occupation by Elders. The focus of this Master Plan is asset condition

improvement and preservation. Proposals for work to infrastructure are noted, as are aspects of human services. Table 10.1 refers.

10.3 Strategies for asset preservation

All social housing properties are managed by Murdi Paaki Regional Housing Corporation and are subject to planned inspection cycles. Under its Strategic Asset Management Plan (SAMP), MPRHC will prepare and keep current effective plans for cyclic and planned maintenance so there is a clear programme and scope of work for each property. Responsive maintenance for time critical repairs will continue to be undertaken on an 'as needed' basis to reinstate a property or appliance to a safe or functional level of service.

The established Tenant Support and Education Programme (TSEP), delivered by Murdi Paaki Services, assists tenants to maintain their tenancies, including complying with the terms of tenancy agreements. This service contributes to improved understanding of tenants of the need to use their properties appropriately, including reducing the potential for defects to go unreported and the scope of restoration to mount.

Financial constraints limit the scope of work which can be carried out and MPRHC relies on project funding to attend to repairs of a more substantial nature. As such, it remains a challenge for MPRHC at times to comply with health and safety, legislative and duty of care obligations. It is anticipated that MPRHC's integration into the MPRHC management framework will provide a more assured and sustainable financial footing and offer tenants greater certainty that their properties will be maintained in good condition.

10.4 Home ownership

Although a small number of respondents to the householder survey were owners, there was not strong interest in transitioning to home ownership among social housing tenants. The CWP has not expressed any enthusiasm for pursuing this form of tenure on behalf of tenants so this HEHP does not contain any recommendations in this regard.

Table 10.1: Master Plan

Strategy	Chapter reference	Improvement	Strategy	Justification
-	-	Land acquisition	No additional lots are required to be purchased	Vacant serviced lots exist should the need for further development arise
-	-	Demolition	No existing dwelling requires to be demolished for reasons of	All existing dwellings are habitable. There are no unoccupied dilapidated dwellings requiring clearance for health and safety reasons, or to make way for a replacement dwelling
-	-	New housing	No new housing is proposed	Demand for Aboriginal social housing in Ivanhoe can be satisfied from the existing portfolio
-	-	Replacement housing	No replacement housing is proposed	Subject to Strategy 5.1.2, existing dwellings are, or can be made, serviceable
-	5.8	Housing extension	No additional bedrooms are proposed	Need identified by the MP Household Survey no longer exists
5.1.1	5.9	Housing repair and maintenance	Roll out a housing repair and maintenance programme to restore a healthy home environment for tenants	Respondents to the MP Household Survey, in answer to objective, closed questions, flagged deficiencies to their properties. Almost all households stated a need for repairs, some urgent. This strategy is intended to restore a healthy and safe living environment for tenants, extend serviceable life of assets and reduce ongoing maintenance costs. It is also directed at rectifying non-compliant access arrangements for those tenants with a disability
5.1.2	5.9	Housing repair and maintenance	Deliver a programme of defined works to attend to serious roofing defects to three dwellings, restore visual amenity and replace evaporative coolers	Inspections have revealed a need for the proposed works in order to avert more major work in the case of rusted roof sheeting, painting to preserve asset condition and new evaporative coolers to replace aged units and obtain most benefit from the proposed solar power/split system installations
9.4.1	9.4	Infrastructure	Negotiate with CDSC to provide kerb and guttering to the full length of Columbus Street and in other locations where access is hampered by stormwater ponding	Some tenants have difficulty in moving in and out of their properties in wet weather as street drainage is not adequately graded to allow runoff to flow unimpeded to discharge points
9.5.1	9.5	Infrastructure	Provide hard-surfaced driveway strips to all dwellings	Hard surfaces to dwellings are required to allow access across drainage channels (table drains) in periods of wet weather, and to reduce vehicle generated dust in dry conditions
9.5.2	9.5	Infrastructure	Provide plantings to property boundaries	Plantings of suitable drought tolerant species are required to create shade, assist in dust control and encourage self-mulching of soils as a means of reducing the impacts of heat and air pollution (dust)

Table 10.1: Master Plan

Strategy	Chapter reference	Improvement	Strategy	Justification
8.2.1	8.2	Human services	Negotiate employment of a Youth Co-ordinator	Youth services are available only one day per week and the person who delivers these on a voluntary basis is about to leave town. The CWP proposes this position to provide wellbeing support to younger people; design, co-ordinated and run social and sporting programmes and broker training
8.2.2	8.2	Human services	Secure reliable, culturally safe packaged aged and disability care	No services whatsoever are currently available to support frail aged people and people with disabilities. The population is experiencing structural ageing and need is ever-increasing
8.2.3	8.2	Human services	Advocate to MPRA for introduction of a Regionally-based Aboriginal community controlled aged care service	The CWP is firmly opposed to the delivery of aged care services to older people by non-Indigenous organisations, particularly ex-Region providers. A Regionally-based ACC service will provide training and employment for community members who wish to care for Elders in their own community, thus ensuring cultural safe care
8.2.4	8.2	Human services	Invite REDI-E to resume delivery of employment and related services in Ivanhoe	No employment services and no associated job readiness services exist in Ivanhoe. The local economy has declined since the closure of the correctional facility. The CWP wishes to see REDI-E reinstate economic services to Ivanhoe through a full-time, resident presence in the community to grow opportunities for economic participation
8.2.5	8.2	Human services	Advocate for resourcing of an Aboriginal Cultural Centre for Ivanhoe	The CWP sees development of an Aboriginal Cultural Centre as providing employment, delivering opportunities to teach culture to children and young people, offering a venue for revitalisation of language, and contributing to the local economy through expanding tourism offerings: increasingly important with sealing of roads to larger centres.

10.5 Probable order of cost

Probable orders of cost for each strategy are shown in Table 10.2. The estimates were prepared on the following basis:

- Costs for building-related work are derived from industry standard cost information and/or for project costs for similar work in the Murdi Paaki Region;
- Prices are current to September 2020;
- An index appropriate to locality is applied;
- Building costs assume that construction takes place in accordance with MPS procurement practice. Projections may need to be re-evaluated if training schemes are integrated;
- Allowance for project management has been assumed to be generally between 10% and 15% of the construction budget depending upon the nature of the work involved and the degree of investigative work required.

Table 10.2: Probable orders of cost, housing and environmental health infrastructure

Strategy	Description	Order of cost (\$) (GST inclusive)
Housing		
5.1.1	Repair and maintenance	470,200
5.1.2	Particular works	349,800
Infrastructure		
9.5.1	Driveway strips	44,000
9.5.2	Boundary plantings	33,000
	Sub-total	897,000
-	Unquantified risk allowance	90,000
-	Project management	112,000
-	Programme administration	90,000
	Total	1,189,000

10.6 Funding sources

Funding for the project will need to be negotiated through the RAHLA as the principal decision-maker on matters of Aboriginal social housing in the Region. As noted previously, MPRHC is not in a sufficiently robust financial position to meet these high-order costs from revenue derived from

property rents and subsidies and is dependent upon grant funding from governments. Table 10.3 is a notional income/expenditure statement for Ivanhoe based on average per property information for 2020.

Table 10.3: Notional income and expenditures relating to Ivanhoe Aboriginal social housing

Amount (\$)		
Income	Rents	166,850
	Subsidy	26,400
	Total revenue	193,250
Outgoings	Rates/charges ⁽¹⁾	25,200
	Administration	39,700
	Property costs	117,600
	Other costs	24,900
	Total outgoings	207,400
	Balance	-14,150

Viability of the service to the Ivanhoe community is subject to the on-going financial support in the form of government grants and subsidies from the Aboriginal Housing Office. Alternative financial investment models such as social impact investing appear hypothetical solutions to funding capital and/or recurrent costs in the context of Aboriginal social housing in the Murdi Paaki Region.

10.7 Staging of works

There are no priorities attaching to the improvements listed in Table 10.1. Repair and maintenance work should be programmed to proceed as one integrated contract, subject to local building sector capacity, as soon as possible for the enjoyment of Elders and for economies of scale.

10.8 Value-adding initiatives

For a small community such as Ivanhoe, integrating training initiatives is problematic as works tend to be short duration but employment could be possible and should be explored. As noted in Table 10.1, the CWP and MPS are encouraged to work with REDI.E to see if employment services can be restored and/or a business identified and created in the community. It should be noted that

interest in operating a motel has been expressed in the past, leading to a business plan being prepared. Initiatives such as this are critical to rebuilding the regional and local economic base that is necessary to underpin the future prosperity and social cohesiveness of communities in the Region.

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