

Bowen Basin population report, 2022

Introduction

The resource sector in regional Queensland utilises fly-in/fly-out and drive-in/drive-out (FIFO/DIDO) workers as a source of labour supply. These non-resident workers live in regional areas while on-shift. The Australian Bureau of Statistics' (ABS) resident population estimates for these areas do not include non-resident workers.

The non-resident population represents the number of FIFO/DIDO workers who are on-shift in the region at a given point in time. This group includes those employed in construction, production and maintenance at mining and gas industry operations, renewable energy projects and resource-related infrastructure.

This report provides non-resident population estimates for the Bowen Basin during the last week of June 2022. It also includes full-time equivalent (FTE) population estimates, which aggregate the resident and non-resident populations to provide a more complete indicator of demand for certain services.

Estimates within this report are derived primarily from the annual Survey of Accommodation Providers conducted by the Queensland Government Statistician's Office (QGSO). The survey includes worker accommodation villages (WAVs), hotels, motels, and caravan parks.

Key findings

Key findings of this report include:

- The Bowen Basin had an estimated non-resident population of 20,540 persons in June 2022, an increase of 1,585 persons or 8% from June 2021.
- In June 2022, the Bowen Basin's non-resident population reached its highest level since the resources boom of 2011 to 2013.
- Non-resident population growth in 2021–22 was due to a combination of factors, with construction and production activity at new and reopened mines, production and maintenance at existing mines, and gas and renewable energy project construction more than making up for a decline in large scale project construction.
- At the LGA level, Isaac had the largest non-resident population in the Bowen Basin in June 2022 (13,405 persons or 65% of the total). The remaining non-resident population was in Central Highlands (4,775 persons or 23%), Banana (1,670 persons or 8%) and Whitsunday (Bowen only) (690 persons or 3%).
- The non-resident population of Isaac grew by 1,325 persons (or 11%) in the year to June 2022. Central Highlands (670 persons or 16%) and Banana (295 persons or 21%) also recorded non-resident population growth. In contrast, the non-resident population of Whitsunday (Bowen only) declined over this period (–705 persons or –50%).
- The Bowen Basin had an estimated FTE population of 100,120 persons in June 2022, comprising 79,580 residents and 20,540 non-resident workers on-shift. Non-resident workers on-shift made up 21% of the FTE population.
- WAVs housed the majority of non-resident workers on-shift in the region in June 2022 (18,150 persons or 88% of the total). The balance (2,390 persons or 12%) stayed in other accommodation such as hotels/motels and caravan parks.
- The total capacity of WAVs in the Bowen Basin in June 2022 was estimated at 29,530 beds, a decrease of 190 beds or less than 1% from June 2021. Most of this decrease occurred in rural areas (–160 beds), with a smaller decline at in-town WAVs (–30 beds).
- The proportion of vacant and available hotel/motel rooms in the region decreased from 40% in June 2021 to 29% in June 2022, driven by increased demand from the resources sector.

Figure 1 Bowen Basin region



The Bowen Basin – at a glance

The Bowen Basin (Figure 1) is Queensland's most important source of export coal. The region comprises the local government areas (LGAs) of Banana, Central Highlands, Isaac and Whitsunday (Bowen only).

Estimated population at June 2022:

Non-resident population.....	20,540
Resident population.....	79,580
Full-time equivalent population.....	100,120



Bowen Basin update, 2021–22

The Bowen Basin in Central Queensland (Figure 3) contains most of Australia's high quality metallurgical (coking and pulverised coal injection (PCI)) coal reserves, as well as significant deposits of thermal coal. As at June 2022, there were 46 coal mines in production and two metalliferous mines located in the region, along with coal seam gas (CSG) and conventional gas operations, and other resource industry-related infrastructure (Table 5).

In the June quarter 2022, metallurgical and thermal coal prices were at record levels, driven by market uncertainties and supply disruptions due to multiple factors including the Russian invasion of Ukraine and extreme weather events (DISER, 2022). In the Bowen Basin, producers reported being affected by wet weather during this period, as well as COVID-19 related absenteeism and tight labour markets (Anglo American, 2022b; BHP, 2022; Coronado Global Resources, 2022; Peabody Energy, 2022; Stanmore Resources, 2022b). These limitations contributed to a reduction in production of saleable coal from Bowen Basin mines in 2021–22 (204.0 Mt) compared with 2020–21 (206.2 Mt) (Queensland Government, 2022).

Despite the recorded fall in production and reported labour constraints, coal industry employment increased over the year to June 2022. The Bowen Basin's coal industry workforce numbered around 37,100 persons at June 2022, an increase of about 1,800 persons or 5% from June 2021 (RSHQ, 2022). While the majority of these workers were engaged at existing operations, workers at new or reopened mines and those involved in project construction also contributed to the increase.

Four coal mines that were in care and maintenance in June 2021—**Bluff** and **Cook** in Central Highlands and **Broadlea** and **Millennium** in Isaac—had recommenced operations by June 2022 (Bowen Coking Coal, 2022a; Metarock, 2022; NRW Holdings, 2021; NRW Holdings, 2022; Stanmore Resources, 2021).

The **Carmichael** mine in Isaac produced first coal in 2021–22 (Queensland Government, 2022). By mid-2022, the **Carmichael Rail Network** in Isaac and Whitsunday (Bowen only) was completed and fully operational, two trial shipments had taken place, and construction of the coal preparation plant at the mine site was nearing completion (Bravus Mining and Resources, 2022a; Bravus Mining and Resources, 2022b; DISER, 2022). The **Vulcan Mine Complex** in Isaac also commenced production in 2021–22, while development at the site continued (QGSO, 2022; Queensland Government, 2022). Operations at **Aquila** in Isaac began in February 2022 and fully ramped up in June (Anglo American, 2022a).

A number of new coal projects were under construction in Isaac in June 2022. **Ironbark No.1** commenced construction in January 2022, with first coal achieved in August 2022 (Fitzroy Mining Operations, 2022). Works on the **Olive Downs Project** started in April 2022, with production forecast to commence in 2023 (Pembroke Resources, 2022). At **Broadmeadow East**, part of the emerging Burton Complex, mobilisation and early site works began in May 2022 and first coal was mined in July (Bowen Coking Coal, 2022b). The **Burton** mine remained in care and maintenance while work commenced to refurbish the accommodation village onsite ahead of recommissioning of other facilities (Bowen Coking Coal, 2022b).

Two renewable energy projects were under construction in the Bowen Basin in June 2022. Construction of stage one of the **Clarke Creek Wind and Solar Farm** in Isaac started in February 2022 and is anticipated to be fully operational in 2024 (Squadron Energy, 2022). In Banana, **Moura Solar Farm** commenced construction in early 2022 with expected completion around August 2022 (Banana Shire Council, 2022).

Santos GLNG expanded its gas activity at Arcadia Valley in the southern Bowen Basin in 2021–22. Work began in late 2021, with significant progress made on civil works and 63 of 201 wells drilled by June 2022 (Santos, 2022a; Santos, 2022b).

Despite the number of coal and other projects under construction in the region in June 2022, the number of workers associated with most of these new projects was relatively small. Compared with June 2021, there were fewer workers engaged in large-scale project construction in June 2022, and more engaged in production and maintenance activities at new and re-opened mines and existing operations.

Non-resident population

At the end of June 2022, the Bowen Basin's non-resident population was estimated at 20,540 persons, up by 1,585 persons or 8% from June 2021 (Table 1).

Almost two-thirds (65%) of non-resident workers on-shift in the region in June 2022 were counted in Isaac (13,405 persons), with the remainder recorded in Central Highlands (4,775 persons or 23%), Banana (1,670 persons or 8%), and Whitsunday (Bowen only) (690 persons or 3%).

Over the year to June 2022, three of the four LGAs in the Bowen Basin recorded non-resident population growth. The largest increase occurred in Isaac, where a combination of new and reopened mines, project construction, and strong production at

Non-resident population

The non-resident population is the number of fly-in/fly-out or drive-in/drive-out (FIFO/DIDO) workers who are living in the area of their workplace temporarily, and who have their usual place of residence elsewhere.

Due to shift arrangements, not all members of the non-resident workforce are present in the local area at one time. For that reason, the non-resident population refers to the number of non-resident workers on-shift at a given point in time, rather than the total non-resident workforce.



some mines contributed to an increase of 1,325 persons (or 11%). Central Highlands recorded a gain of 670 persons (or 16%), due to maintenance events at mines near Blackwater, two mine re-openings, and increased gas construction activity. Banana gained 295 persons (or 21%), driven by ongoing coal and gas activity and solar farm construction near Moura. In contrast, the non-resident population of Whitsunday (Bowen only) fell by 705 persons (or 50%) between June 2021 and June 2022, mainly due to the wind-down of construction on the Carmichael Rail Network project.

Table 1 Non-resident population, Bowen Basin LGAs, as at June

LGA	2021	2022	Change, 2021 to 2022	
	— persons —	— persons —	persons	%
Banana	1,375	1,670	295	21
Central Highlands	4,105	4,775	670	16
Isaac	12,080	13,405	1,325	11
Whitsunday (Bowen only)	1,395	690	-705	-50
BOWEN BASIN TOTAL	18,955	20,540	1,585	8

Figures in tables in this report have been rounded to the nearest five; see Notes at end of report for details.

Source: QGSO estimates

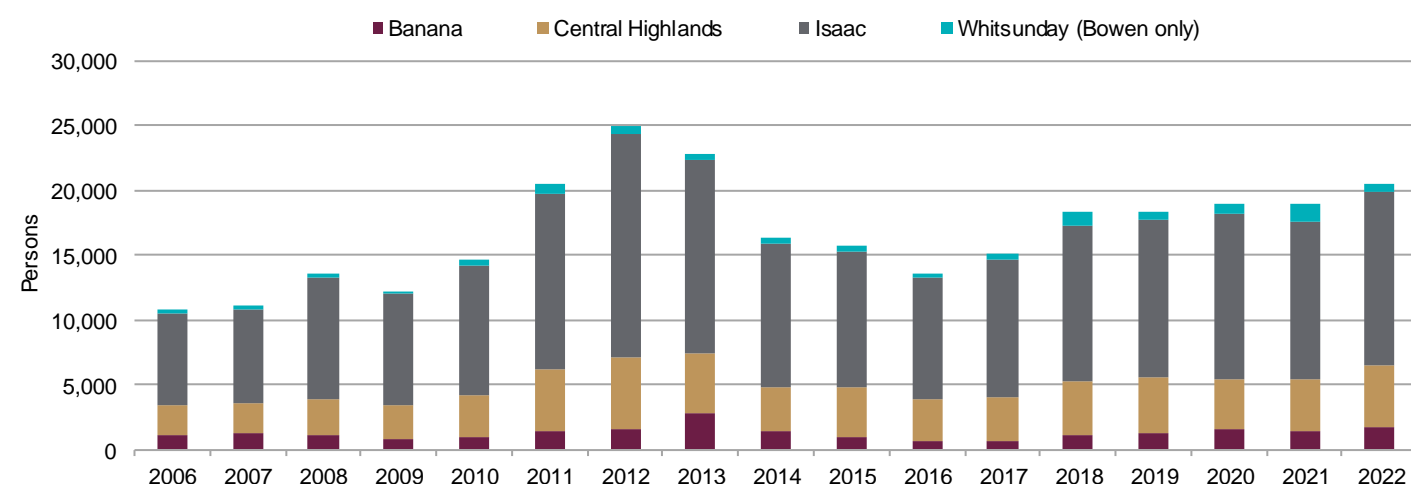
As Figure 2 shows, the Bowen Basin's non-resident population increased from 10,765 persons in 2006 to a peak of 25,035 persons in 2012. This growth was driven by the construction of major projects, including new coal mines, mine expansions, and associated infrastructure. The subsequent decline to 13,560 persons in 2016 reflects the transition to the production phase as large, temporary construction workforces were replaced by smaller operational workforces.

Increases in the region's non-resident population between 2016 and 2018 were largely due to workforces associated with expanded coal production and projects to sustain ongoing operations rather than major project construction, as mining companies responded to high metallurgical and thermal coal prices. Additional influences including new and reopened mines, maintenance activities, and solar farm construction also boosted non-resident population growth over this period.

From 2018 to 2021, the Bowen Basin's non-resident population remained relatively stable (between 18,410 persons and 19,055 persons). While ongoing coal production continued to be the main influence on numbers, a variety of other factors—including renewable energy and other project construction, gas activity, and maintenance events—also contributed to the non-resident population in different years and in different LGAs. In 2021, the non-resident population included a sizeable number of workers engaged in mine and rail construction activity.

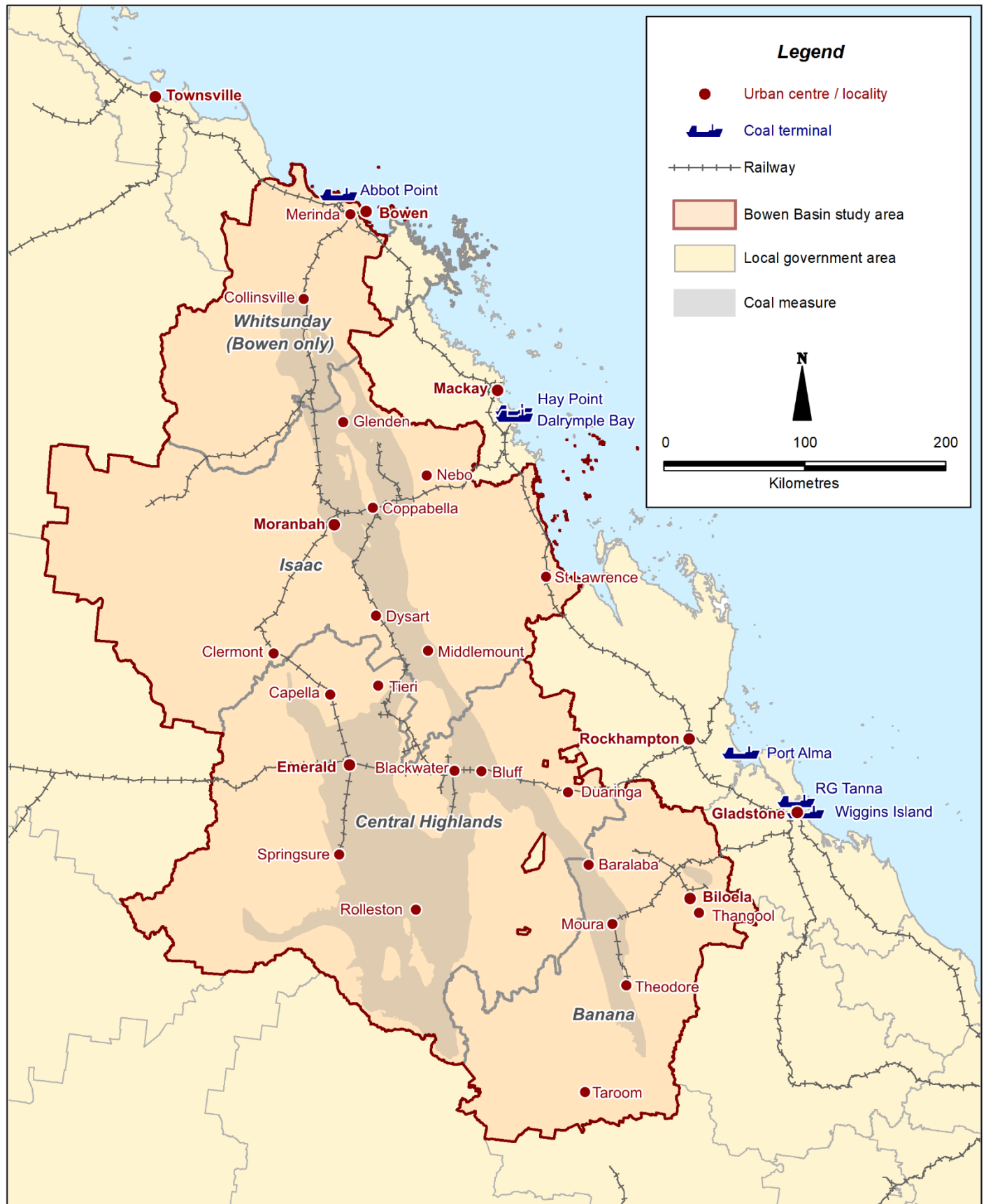
In June 2022, the Bowen Basin's non-resident population reached its highest level since the resources boom of 2011 to 2013. Non-resident population growth in 2021–22 was due to a combination of factors, with construction and production activity at new and reopened mines, ongoing production and maintenance events at existing mines, expanded gas activity, and renewable energy project construction more than making up for a decline in large-scale project construction.

Figure 2 Non-resident population, Bowen Basin LGAs, as at June



Source: QGSO estimates

Figure 3 Bowen Basin study area



Source: QGSO

FTE population estimates

In June 2022, the Bowen Basin had an estimated FTE population of 100,120 persons, comprising 79,580 residents and 20,540 non-resident workers on-shift (Table 2). Non-resident workers on-shift made up 21% of the region's total FTE population.

Isaac had the largest FTE population (35,955 persons) of the region's LGAs in June 2022, with 13,405 non-resident workers on-shift accounting for 37% of its FTE. The FTE population of Central Highlands was 33,130 persons, with a smaller number and proportion of non-resident workers on-shift (4,775 persons or 14% of its FTE) than in Isaac.

Four urban centres and localities (UCLs) had non-resident populations of 1,000 persons or more in June 2022—Moranbah (2,440 persons), Blackwater (1,990 persons), Dysart (1,935 persons) and Middlemount (1,545 persons). There was also a large non-resident population in rural areas of Isaac (6,485 persons), reflecting the location of several large WAVs outside of town centres.

Full-time equivalent population

The FTE population measure is the sum of the resident population (people who live in the area permanently) and the non-resident population (i.e. the number of non-resident workers on-shift).

The FTE population measure provides a more complete estimate of total demand for certain services and infrastructure in regions with a high incidence of FIFO/DIDO workers.

Table 2 FTE population estimates, Bowen Basin LGAs and selected UCLs, June 2022

LGA	Location ^(a)	UCL	Resident population ^(b)	Non-resident population	FTE population
			— persons —		
Banana	In town	Baralaba	260	130	395
		Biloela	5,720	350	6,070
		Moura	1,695	460	2,155
		Other towns ^(c)	1,285	15	1,300
	Rural areas	5,665	715	6,380	
Banana total			14,625	1,670	16,295
Central Highlands	In town	Blackwater	4,675	1,990	6,670
		Bluff	235	265	500
		Capella	990	50	1,035
		Emerald	14,380	405	14,785
		Springsure	745	75	820
		Tieri	725	605	1,330
	Other towns ^(c)	1,350	20	1,365	
Rural areas	5,260	1,370	6,625		
Central Highlands total			28,355	4,775	33,130
Isaac	In town	Clermont	1,975	90	2,060
		Dysart	2,355	1,935	4,290
		Glenden	490	585	1,075
		Middlemount	1,930	1,545	3,475
		Moranbah	9,125	2,440	11,565
	Nebo	620	330	950	
Rural areas	6,060	6,485	12,545		
Isaac total			22,550	13,405	35,955
Whitsunday (Bowen only)	In town	Bowen	9,815	90	9,905
		Collinsville	1,325	450	1,775
	Other towns ^(c)	505	45	545	
Rural areas	2,405	105	2,510		
Whitsunday (Bowen only) total			14,045	690	14,740
BOWEN BASIN TOTAL			79,580	20,540	100,120

(a) Refer to Notes at end of report for explanation of 'in town' and 'rural areas'.

(b) QGSO unpublished data – provisional and subject to revision.

(c) UCLs with only one accommodation provider or fewer than 20 non-resident workers are aggregated in 'Other towns'.

Source: QGSO estimates

Non-resident worker accommodation

Most non-resident workers on-shift in the Bowen Basin stay in WAVs, which accommodated 18,150 persons or 88% of the total in June 2022 (Table 3). Other types of accommodation, including hotels/motels and caravan parks, accounted for the remainder (2,390 persons or 12%).

Across the region, the number of non-resident workers on-shift accommodated in WAVs increased overall by 1,075 persons in the year to June 2022. In comparison, the number of workers staying in other accommodation increased by 510 persons over this period.

At the LGA level, the largest changes in accommodation usage in 2021–22 occurred in Isaac and Whitsunday (Bowen only). In Isaac, non-resident population growth led to an additional 1,335 persons staying in WAVs, with increased usage of establishments in rural areas and in town by workers engaged in construction and production activities. The number of non-resident workers on-shift staying in WAVs in Whitsunday (Bowen only) fell by 750 persons, largely due to a reduction in the number of rail construction workers.

Elsewhere in the region, non-resident population growth saw increased usage of WAVs as well as other accommodation over the year to June 2022. Increased numbers in other accommodation in Banana (240 persons) and Central Highlands (235 persons) were driven by higher demand from workers engaged in maintenance and production activities at existing mines.

Worker accommodation villages (WAVs)

WAVs are commonly used to house non-resident workers on-shift. WAVs typically consist of demountable dwellings arranged in a village, with common dining, laundry and recreational facilities.

Table 3 Non-resident population by accommodation type, Bowen Basin LGAs, as at June

LGA	WAVs	Other ^(a)	Total	WAVs	Other ^(a)	Total
	2022			Change, 2021–22		
	— persons —					
Banana	1,185	485	1,670	55	240	295
Central Highlands	4,180	595	4,775	435	235	670
Isaac	12,280	1,125	13,405	1,335	–10	1,325
Whitsunday (Bowen only)	505	185	690	–750	45	–705
BOWEN BASIN TOTAL	18,150	2,390	20,540	1,075	510	1,585

(a) 'Other' includes hotels/motels, caravan parks and other accommodation. Refer to Notes at end of report for additional information.

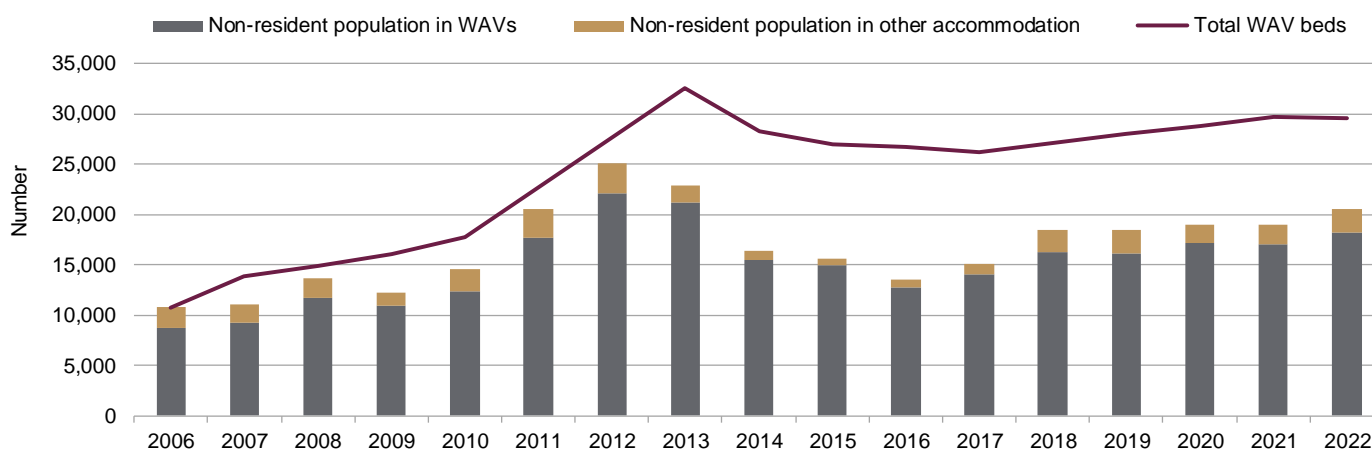
Source: QGSO estimates

WAVs have been the predominant type of non-resident worker accommodation used in the Bowen Basin since monitoring began in 2006, with much smaller numbers in other accommodation (Figure 4). Other accommodation types often cater for additional workers requiring accommodation in periods of high demand. For example, at the height of the resources boom in 2012, 2,880 non-resident workers on-shift (12% of total) stayed in other accommodation.

WAVs have several advantages over other types of accommodation for housing non-resident workers, including the flexibility to expand or contract capacity with changing workforce demand, economies of scale for large workforces, and the ability to house workers on or near work sites in remote areas. The number of WAV beds across the region varies from year to year as camps open, close (either temporarily or permanently), and change in size, in response to demand from industry and the needs of specific projects.

As Figure 4 shows, the number of WAV beds in the region increased along with non-resident population growth over the period leading up to June 2012, and continued to increase in the year to June 2013 as the non-resident population fell. Rapid growth leading to the peak in 2013 was driven by new camps catering for the large, temporary construction workforces of major gas pipeline and coal projects. Moderate growth between 2017 and 2021 reflects a combination of influences, including additional bed capacity catering for workers at construction projects and coal operations.

The noticeable difference between the number of WAV beds and number of non-resident workers on-shift in the region since 2013 does not necessarily indicate surplus bed availability, as many establishments reserve rooms for workers who are rostered off.

Figure 4 Non-resident population by accommodation type^(a) and WAV bed capacity, Bowen Basin, as at June

(a) 'Other' includes hotels/motels, caravan parks and other accommodation. Refer to Notes at end of report for additional information.

(b) Refer to Notes at end of report for explanation of 'in town' and 'rural areas'.

Source: QGSO estimates

The total capacity of WAVs in the Bowen Basin in June 2022 was estimated at 29,530 beds, an overall decrease of 190 beds or less than 1% from June 2021 (Figure 4). Most of this decrease occurred in rural areas (–160 beds) (Table 4). Across the region, the largest fall in bed capacity was in WAVs in rural areas of Whitsunday (Bowen only) (–920 beds), due to the closure of temporary rail construction camps and a reduction in capacity at other WAVs.

In contrast, the number of rural WAV beds in other Bowen Basin LGAs increased between June 2021 and June 2022. In rural areas of Isaac, changes in capacity at existing camps, one reopened camp, and a new temporary construction camp resulted in a net increase of 335 beds. Growth in the number of WAV beds in rural areas of Central Highlands (250 beds) and Banana (170 beds) was largely due to additional capacity at gas camps.

Compared with changes in rural areas, the number of WAV beds in town remained relatively stable over the year to June 2022, with small changes at the LGA level resulting in a net loss of 30 beds across the Bowen Basin.

Table 4 WAV bed capacity, Bowen Basin LGAs, as at June

LGA	Rural areas			In town		
	WAV capacity		Change	WAV capacity		Change
	2021	2022	2021–22	2021	2022	2021–22
	— beds —					
Banana	1,145	1,315	170	650	650	0
Central Highlands	2,425	2,675	250	3,790	3,795	5
Isaac	10,480	10,815	335	9,480	9,450	–30
Whitsunday (Bowen only)	1,140	225	–920	605	600	–5
BOWEN BASIN TOTAL	15,195	15,030	–160	14,530	14,495	–30

Figures in tables in this report have been rounded to the nearest five; see Notes at end of report for details.

Source: QGSO estimates

In relation to other accommodation usage, the proportion of vacant and available hotel/motel rooms in the Bowen Basin declined in 2021–22. Around 29% of hotel/motel rooms were vacant and available in June 2022, down from the proportions in June 2021 (40%) and June 2020 (47%) (Table 5). Increased demand from the resources sector was the driving influence behind the decline in availability in 2021–22. Also, some hotels/motels reported higher levels of activity in June 2022 with the easing of travel restrictions linked to COVID-19.

All LGAs in the Bowen Basin recorded higher occupancy of hotel/motel accommodation in June 2022 than in June 2021. Banana recorded the largest decrease in vacant and available hotel/motel rooms, falling from 47% in June 2021 to 29% in June 2022, largely due to greater numbers of FIFO/DIDO workers engaged in mining, energy production and construction, and related activity.



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The vacant and available rate in Central Highlands fell from 46% to 30%, driven by increased demand from the mining industry as well as other guests. The proportion of vacant and available rooms was also lower in Whitsunday (Bowen only), falling from 20% to 15% due to increased usage by resource industry workers and other guests. Towns such as Emerald in Central Highlands and Bowen in Whitsunday (Bowen only) typically attract a diverse clientele including tourists and business travellers as well as FIFO/DIDO workers.

In Isaac, the proportion of vacant and available hotel/motel rooms also decreased slightly in the year to June 2022, from 39% to 36%. Compared with the other Bowen Basin LGAs, hotel/motel usage in Isaac is overwhelmingly related to demand for accommodation from the mining industry, with relatively few other guests.

Table 5 Vacant and available hotel/motel rooms, Bowen Basin LGAs, as at June

LGA	Occupied by non-resident workers	Vacant and available ^(a)	Balance ^(a)	Total hotel/motel rooms ^(a)	Vacant and available hotel/motel rooms		
					2020	2021	2022
		2022			— % —		
		— rooms —					
Banana	230	155	150	530	49	47	29
Central Highlands	535	460	520	1,515	56	46	30
Isaac	300	300	225	825	32	39	36
Whitsunday (Bowen only)	185	85	295	570	43	20	15
BOWEN BASIN TOTAL	1,250	1,000	1,190	3,440	47	40	29

(a) Refer to Notes at end of report for explanation of 'vacant and available' and 'balance'.

Source: QGSO estimates



Queensland Government Statistician's Office

Table 6 Existing resource operations and projects under construction^(a), Bowen Basin, June 2022

Category	Operation / project name	Company name	LGA
CM	Aquila	Anglo American	Isaac
CM	Baralaba North	Baralaba Coal Company	Banana
CM	Blackwater	BHP	Central Highlands
CM	Blair Athol	TerraCom	Isaac
CM	Bluff	Bowen Coking Coal	Central Highlands
CM	Broadlea	Fitzroy Australia Resources	Isaac
CM	Broadmeadow	BHP	Isaac
CM	Broadmeadow East	Bowen Coking Coal	Isaac
CM	Byerwen	QCoal Group	Isaac
CM	Callide	Batchfire Resources	Banana
RI	Callide Power Station	CS Energy	Banana
CM	Capcoal Surface Operations	Anglo American	Isaac
CM	Carborough Downs	Fitzroy Australia Resources	Isaac
CM	Carmichael	Bravus Mining and Resources	Isaac
RI	Carmichael Rail Network	Bravus Mining and Resources	Isaac, Whitsunday (Bowen only)
CM	Caval Ridge	BHP	Isaac
RE	Clarke Creek Wind and Solar Farm	Squadron Energy	Isaac
CM	Clermont	Glencore Coal	Isaac
CM	Collinsville	Glencore Coal	Whitsunday (Bowen only)
CM	Cook	Constellation Mining	Central Highlands
CM	Coppabella	Peabody Energy	Isaac
RI	Coppabella Train Loadout Facility	Pacific National	Isaac
MM	Cracow Gold Mine	Aeris Resources	Banana
CM	Curragh	Coronado Coal	Central Highlands
CM	Daunia	BHP	Isaac
CM	Dawson	Anglo American	Banana
CSG	Denison North (Rolleston)	Denison Gas	Central Highlands
CM	Ensham	Ensham Resources	Central Highlands
CM	Foxleigh	Middlemount South	Isaac
CSG	GLNG Drilling and Completions	GLNG ^(b)	Banana, Central Highlands
CSG	GLNG Operations and Gas Gathering	GLNG	Banana, Central Highlands
CM	Goonyella Riverside	BHP	Isaac
CSG	Greater Meridian SeamGas	WestSide Corporation	Banana
CM	Gregory Project	Sojitz Blue	Central Highlands
CM	Grosvenor	Anglo American	Isaac
CM	Hail Creek	Glencore Coal	Isaac
CM	Ironbark No. 1	Fitzroy Australia Resources	Isaac
CM	Isaac Plains Complex ^(c)	Stanmore Resources	Isaac
CM	Jellinbah East	Jellinbah Group	Central Highlands
CM	Kestrel	Kestrel Coal Resources	Central Highlands
CM	Lake Vermont	Jellinbah Group	Isaac
CM	Meteor Downs South	Sojitz Blue	Central Highlands
CM	Middlemount	Middlemount Coal	Isaac
CM	Millennium	MetRes	Isaac
CM	Minerva	Sojitz Blue	Central Highlands
CM	Moorvale	Peabody Energy	Isaac
RI	Moranbah Ammonium Nitrate Plant	Incitec Pivot	Isaac
CSG	Moranbah Gas Project	Arrow Energy	Isaac
CM	Moranbah North	Anglo American	Isaac
RE	Moura Solar Farm	MYTILINEOS	Banana



Category	Operation / project name	Company name	LGA
MM	Mt Carlton Gold Mine	Navarre Minerals	Whitsunday (Bowen only)
RI	Nebo Train Support Facility	Pacific National	Isaac
CM	Newlands	Glencore Coal	Isaac
CM	North Goonyella	Peabody Energy	Isaac
RI	North Queensland Export Terminal (Abbot Point Operations)	North Queensland Export Terminal	Whitsunday (Bowen only)
CM	Oaky Creek	Glencore Coal	Central Highlands
CM	Olive Downs Project	Pembroke Resources	Isaac
CM	Peak Downs	BHP	Isaac
CM	Poitrel	Stanmore Resources	Isaac
CM	QCoal Northern Hub	QCoal Group	Whitsunday (Bowen only)
CM	Rolleston	Glencore Coal	Central Highlands
CM	Saraji	BHP	Isaac
CM	South Walker Creek	Stanmore Resources	Isaac
CM	Vulcan Mine Complex	Vitrinite	Isaac
CM	Yarrabee	Yancoal Australia	Central Highlands

CM = coal mine CSG = coal seam / conventional gas MM = metalliferous mine RE = renewable energy RI = related infrastructure

(a) Includes coal mining operations, metalliferous mines, gas operations, resource industry-related infrastructure, and projects under construction as at June 2022. Operations that have ceased production or were in care and maintenance, including Burton and Grasstree in Isaac LGA, are not included in this list.

(b) Santos Gladstone LNG (GLNG) is a joint venture between Santos, PETRONAS, Total and KOGAS.

(c) Includes Isaac Plains East and Isaac Downs.

Source: QGSO 2022

Notes

LGA – local government area UCL – urban centre and locality

Place names refer to local government areas unless otherwise specified.

Whitsunday (Bowen only) comprises the statistical areas level 2 (SA2s) of Bowen and Collinsville, which cover the area of former Bowen Shire.

Data in this report are derived from surveys conducted by QGSO in 2022 and other sources. The Survey of Accommodation Providers counted non-resident workers staying in worker accommodation villages (WAVs), hotels, motels, caravan parks and other commercial accommodation on a medium to long-term basis during the last week of June 2022. Short-term and overnight visitors are not regarded as non-resident workers. The Resource Employment Survey collected workforce information from all resource companies with existing operations and projects in the Bowen Basin as at June 2022.

Non-resident workers are people who fly-in/fly-out or drive-in/drive-out (FIFO/DIDO) to work and live in the area temporarily while rostered on, and who have their usual place of residence elsewhere. This group includes employees, contractors and associated sub-contractors, employed in construction, production, and maintenance at mining and gas industry operations and projects, renewable energy projects and resource-related infrastructure. Figures in this report refer to the number of non-resident workers on-shift, or present in the area at a given point in time, and should not be confused with total non-resident workforce numbers.

Non-resident population data presented in this report are a point-in-time measure, based on the best information available at the time of the surveys. Non-resident worker numbers may vary in response to changing production demands, prevailing weather and industrial disputes. At the time of the 2022 surveys, the number of non-resident workers on-shift in the Bowen Basin was unaffected by widespread adverse weather events or industrial action.

Resident population estimates for 2022 are unpublished QGSO estimates, which are provisional and subject to revision.

'In town' includes populations counted in defined urban centres and localities (UCLs), as well as non-resident workers housed within 5km of town. 'Rural areas' include populations outside of defined UCLs, including non-resident workers more than 5km from town.

'Other' accommodation includes hotels, motels, caravan parks and other private rental accommodation.

'Vacant and available' refers to hotel/motel rooms that were not occupied by non-resident workers or other guests and were vacant and available on the night of the survey. 'Balance' includes hotel/motel rooms occupied by short-term visitors, held for non-resident workers under permanent booking arrangements although not actually occupied on the night of the survey, or otherwise unavailable to prospective guests.

Figures in tables have been rounded to the nearest five. As a result of rounding, discrepancies may occur between sums of the component items and totals. Percentages and other calculations are made prior to rounding of figures and discrepancies might therefore exist between these calculations and those that could be derived from the rounded figures.



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