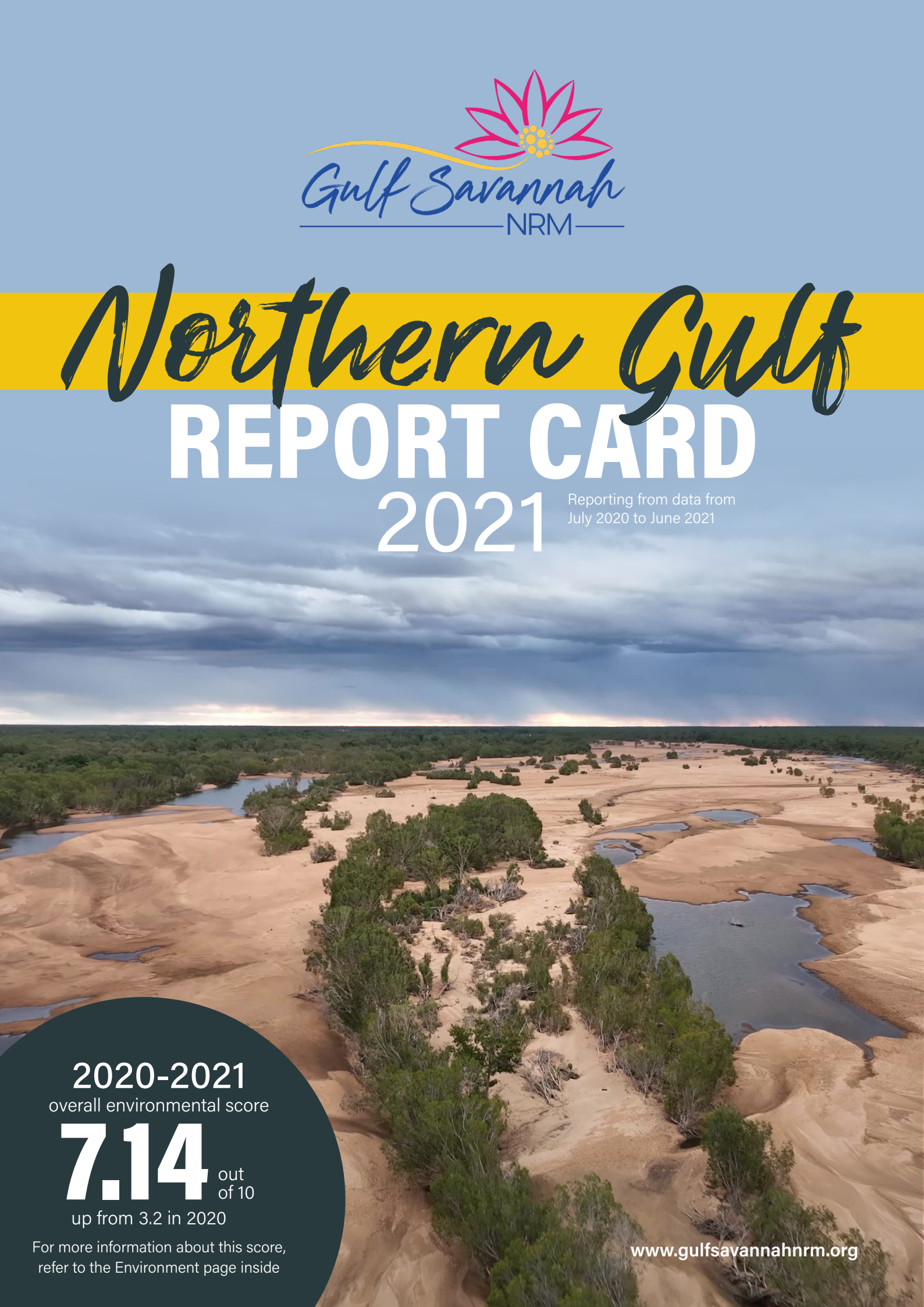
Gulf Savannah NRM

Northern Gulf REPORT CARD 2021

Reporting from data from July 2020 to June 2021



2020-2021
overall environmental score

7.14 out of 10

up from 3.2 in 2020

For more information about this score, refer to the Environment page inside

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Case studies

Dagworth Station

Topside Bush Paddock on Dagworth Station was originally over 31,000ha and contained three annual waterways – the Dagworth, Firey and Cattle creeks. Traditionally, when this paddock was stocked, the cattle lived in the creeks and sweeter country overgrazing the grasses in the sensitive riparian zones and leaving the riverbanks exposed and bare of groundcover – leading to erosion and sediment runoff.

Through the Gulf Rivers Riparian Improvement Project, this paddock was split into three, and new bores were drilled on the property to provide extra water points across the new, smaller paddocks. This has helped protect endangered and of-concern vegetation. The newly implemented grazing system will leave the country in better condition over the dry, and at the end of the dry remaining groundcover will maintain the soil in preparation for the wet season.

Abingdon Downs station

The Einasleigh paddock at Abingdon Downs had been stocked continuously, and cattle had only one water source – the Einasleigh River. This project provided alternative off-stream watering points thanks to the installation of 16km of polypipe, six new dams and a new water tank plumbed into four new troughs. In total, 16,000ha of riparian area has been fenced off. With stock excluded from these sensitive areas riparian health will improve dramatically.

Scardons Hill Station

Two large paddocks at Scardons Hill had historically been overstocked but underutilised due to poor water availability during the dry season. To address this issue, Gulf Savannah NRM worked with the property managers to install more water points, including 17 new bores and tanks and 25 new troughs – and divide the two paddocks into six smaller ones.

This allowed for wet season spelling and rotational grazing to allow time for the country to recover and land condition to improve.

Burlington station

Fencing was established on Burlington Station to create a new grazing management regime. Rubbervine was treated across an area of more than 100ha. Three new watering points and a submersible pump have been installed to improve stock management across the property, reduce grazing pressure and improve the condition of native vegetation.

Ooralat Station

At Ooralat Station, the station owners destocked their river frontage to the Einasleigh River for 12 months to increase the pasture biomass around an infestation of Rubbervine.

They then waited for sufficient rain to dampen the soil to protect native grasses and seedbank before implementing a strategic controlled burn.

Working in conjunction with Indigenous rangers from neighbouring Talaroo Station, they conducted the burn using a combination of conventional and traditional burning methods to burn off and kill rubbervine infesting the riparian area. This will improve the condition of native vegetation along the 28km stretch of the Einasleigh River.

Key outcomes of these case studies

The condition of over
99,492ha
of native vegetation was improved

Over
192km
of fencing installed

Weeds were controlled on
1,502ha
of land

7,882 pigs
were removed from riparian areas

41km of water pipelines,
2 water pumps,
7 dams,
28 water tanks,
24 water bores,
51 water troughs
were installed

The amount of sediment flowing into waterways was reduced on
61,091ha
of land

Approx
$1,814,000
of in-kind landholder funding was leveraged consisting of labour, equipment, materials and contractor costs

These projects were delivered through the Natural Resources Investment Program, which is funded by the Queensland Government.

ENVIRONMENT

The mean amount of moisture in the soil was about **above average**

Average since 2000 was 452mm, in 2021 it was **483mm**.

Tree cover was **higher than average**

Since 2000 was 7.4%, in 2021 it was **8.9%**.

Leaf area index was **above average**

Average since 2000 was 0.91 m^2/m^2, in 2021 it was **0.98 m^2/m^2**.

River inflows were about **average**

Average since 2000 was 297.8mm, in 2021 it was **243.6mm**

Vegetation growth was **above average**

Average since 2000 is 302.83 gC/m^2, in 2021 it was **357.21 gC/m^2**.

The area of unprotected soil* was **below average**

Average since 2000 is 13.6%, 2021 is **11.8%**.

These figures have been derived from the Centre for Water and Landscape Dynamics, Australian National University (2020)

* Annual mean of soil unprotected by vegetation or litter

The overall environmental score has been determined by a combination of environmental and climatic data sets. In 2019-20 period, the region was still grappling from the effects of floods earlier in 2019, combined with above average maximum temperatures, number of hot days and below average vegetation growth and river flows. These figures were produced by the Australian National University.

OVERVIEW OF THE NORTHERN GULF

Population

9,392

Increase from 2021 of 0.75%. Increase since 2001 was 7.8%, Queensland population has grown by 30% in same period.

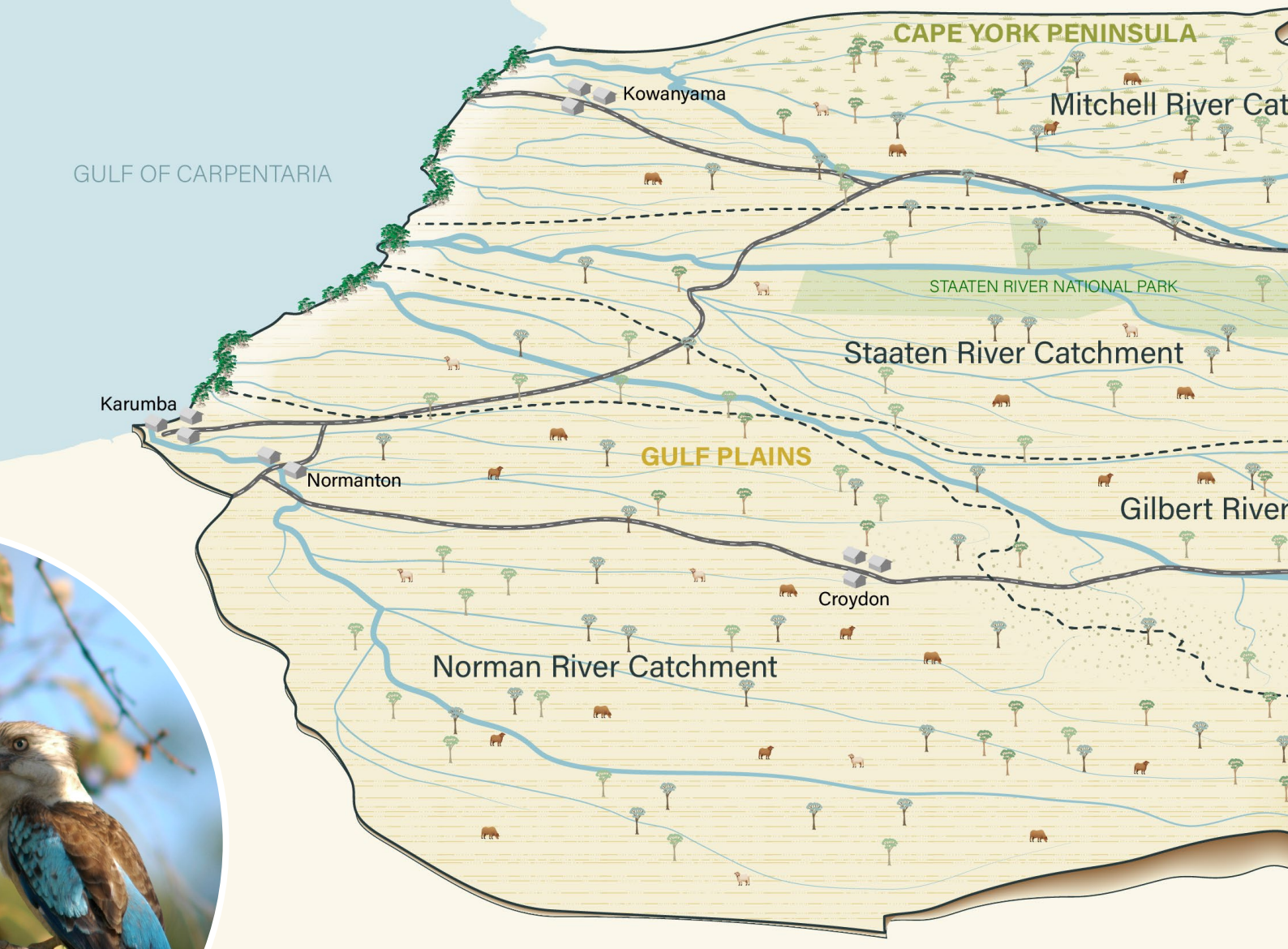
Land area

194,062
SQ KM

Total number of agricultural holdings

412

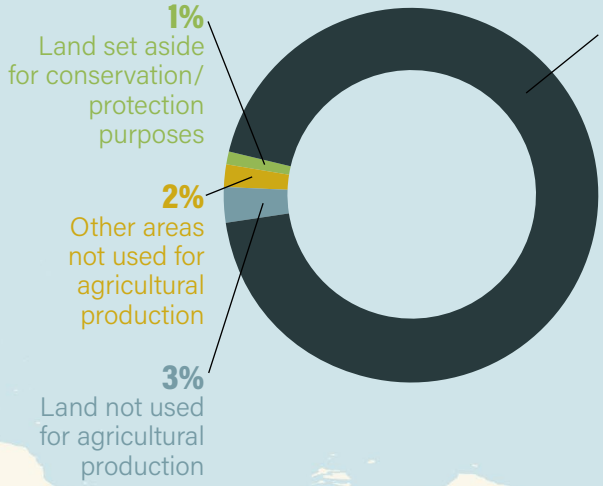
Source: ABARES AGRICULTURAL COMMODITIES BY NRM Region 2020/21 - Land mainly used for agricultural production Category Count



REGION

Land use

Of the area within land holdings reported in ABARES Agricultural Commodities, 20/21



94%

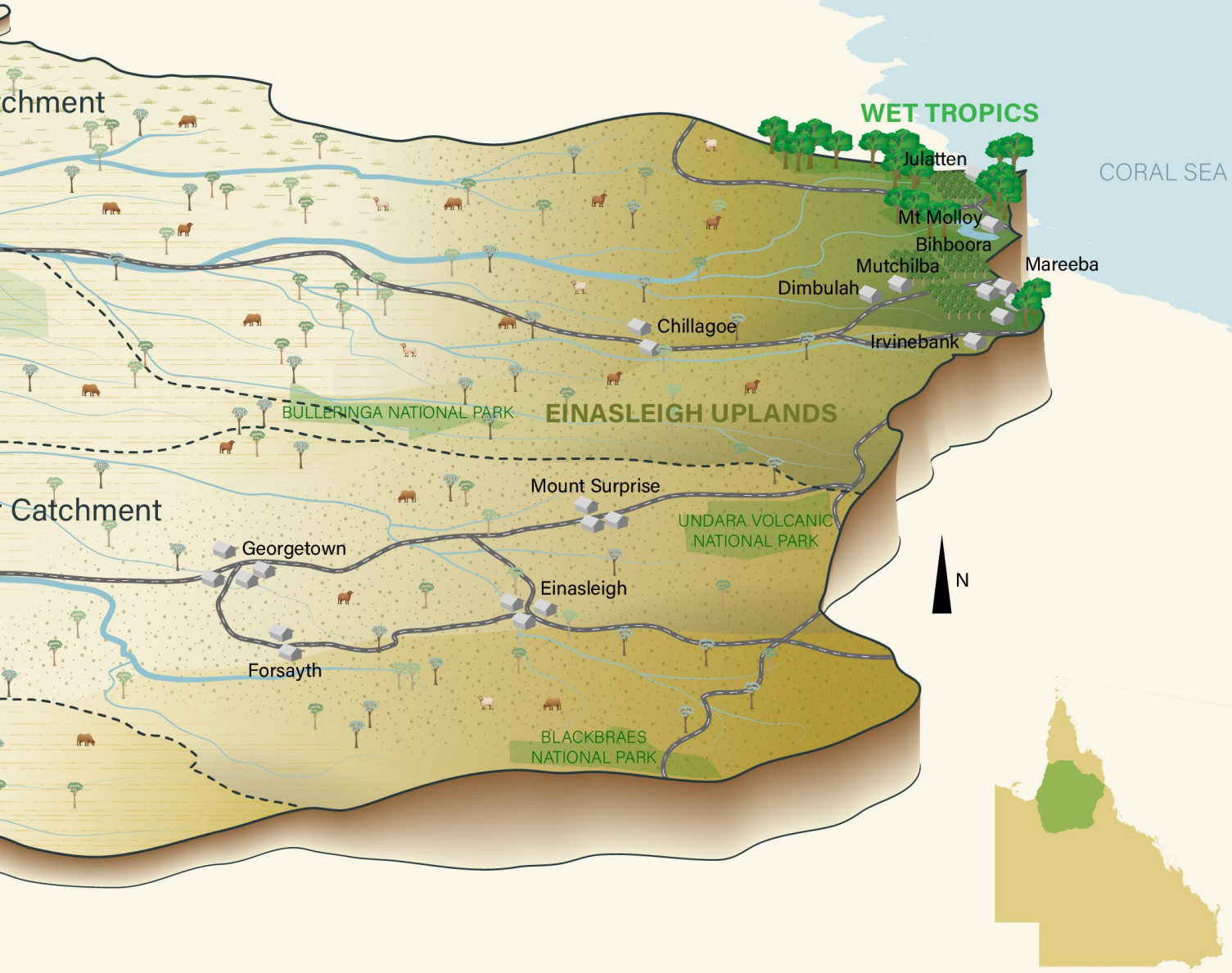
Land mainly used for agricultural production

Land mainly used for grazing
96.9%

Land mainly used for crops
2.7%

Land mainly used for forestry (including plantation and native forest)
0.33%

Land mainly used for other agricultural purposes
0.02%



SOCIAL

Average age of a land manager

54 YEARS OLD

2018-19 data

Population change 2001–2021

+7.8%

Percentage of income generated by farm

84%

Percentage of total population that is Indigenous

19%

Total median income

$40,045

Carpentaria and Croydon shires are in **most disadvantaged 20%**

Mareeba and Etheridge shires are in **most disadvantaged 40%**

Socio-economic Disadvantage and Index of Education and Occupation (IEO) and Economic Resources (IER)

ECONOMIC

Top 5 subdivisions by industry for employment:

Agriculture, forestry and fishing	**17.5%**
Health care and social assistance	**12.2%**
Public administration and safety	**9.1%**
Education and training	**8.6%**
Retail trade	**7.7%**

Total agricultural production in 2020-21 in the Northern Gulf region was

$724,793,222

5% of Queensland production over that period

888,410 HEAD IN 2020-21

down from 965,652 in 2019-20

Cattle price

July 2019	June 2020	June 2021
$4.85 P/KG CWT	**$7.54 P/KG CWT**	**$9.30 P/KG CWT**

Fisheries catch for 2019-20

1,754 TONNES

Gross value of production

$23.6 MILLION

for entire Gulf inshore fishery

Renewable energy generation

62	250	1045
MW EXISTING	**MW UNDER CONSTRUCTION**	**MW PLANNED**

Sources: ABS 2021 Census data, Queensland regional profiles (Qld Government statistician's office, Queensland Treasury) qgso.qld.gov.au, Local government area profiles, Tourism research Australia, Economic and social indicators for the Queensland Gulf of Carpentaria inshore fin fish fishery (publications.qld.gov.au) power plants maps of Queensland (dnrm.qld.gov.au)

CLIMATE IN 2021

Annual rainfall was about **average**

Average since 2000 is 972 mm, 2021 was **915 mm**.

Maximum temperature was about **average**

Average since 2000 is 40.16°C, 2021 was **40.03°C**.

Minimum temperature was **above average**

Average since 2000 is 8.19°C days, 2021 was **9.79°C**.

The number of days above 35°C was **above average**

Average since 2000 is 92.5 days, 2021 was **97.6 days**.

The area burnt by bushfire was **below average**

Average since 2000 is 17%, in 2021 it was **14.6%**

Carbon emissions from fire were **below average**

Average since 2003 is 28.33 gC/m², in 2021 it as **22.98 gC/m²**

Carbon uptake by vegetation was **above average**

Average since 2000 is 302.83gC/m², in 2021 it was **357.21 gC/m²**

Inundation was **above average**

Average since 2000 is 1.25%, in 2021 it was **1.28%**.

ACKNOWLEDGEMENT OF COUNTRY

Gulf Savannah NRM respectfully acknowledges the Traditional custodians and the First people of the land and water on which we work and live.

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