



# BROUGHTON RIVER

## River Basin Summary



**Population (2006):**<sup>1</sup> 49,294

**Major Towns:**<sup>1</sup> Port Pirie, Kadina

**Major Rivers:**<sup>2</sup> River Broughton, Rocky River, Yackamoorundie Creek

### Surface Water Storages:<sup>2, 3, 4</sup>

Largest known storages: Bundaleer, Beetaloo

No. of storages: 4

Storage capacity (ML): >9,550

### Licensed Irrigation:

Largest areas:<sup>3</sup> None

Number of licenses:<sup>5</sup> n/a

Average annual allocation (ML):

    Since 1996-97: n/a

    Minimum: n/a

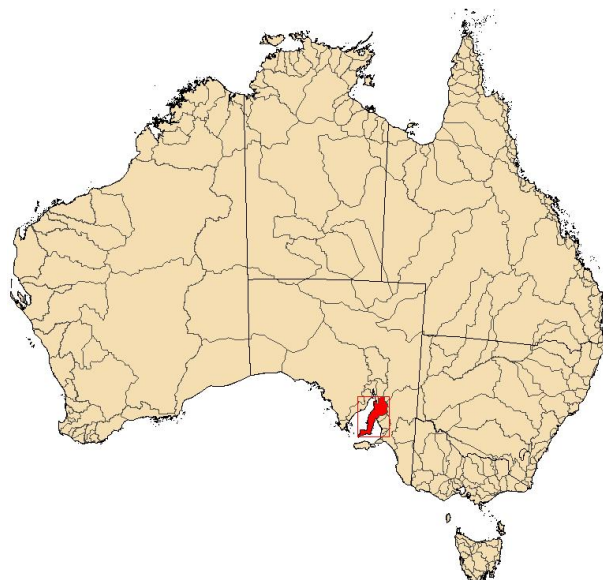
    Maximum: n/a

Average annual diversion (ML):

    Since 1996-97: n/a

    Minimum: n/a

    Maximum: n/a



### Groundwater:

Number of production bores:<sup>7</sup> 8,780

Recharge rate (mm/year):<sup>8</sup> Data being compiled

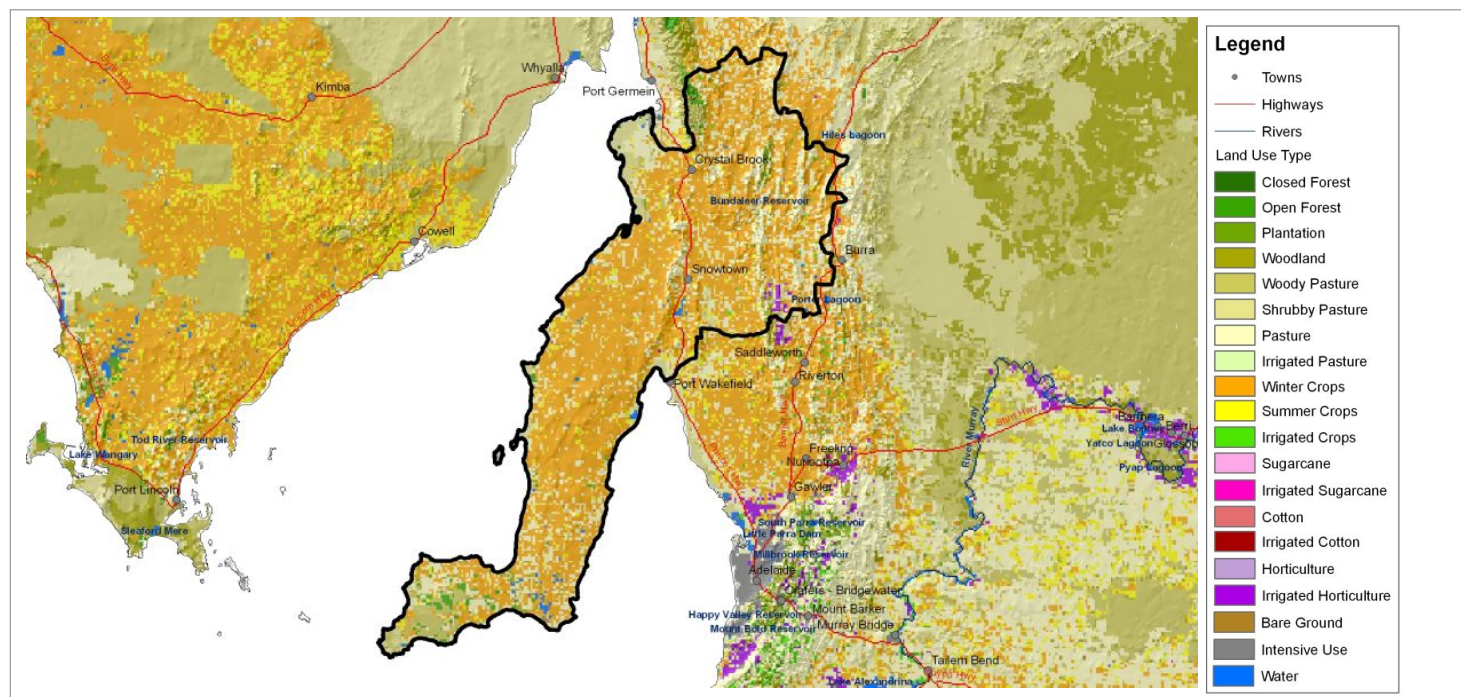
Yield (ML/year):<sup>8</sup> Data being compiled

Extraction (ML/year):<sup>7</sup> Data being compiled

### Rainfall Reliability:

Chance of receiving average seasonal rainfall:<sup>8</sup> Medium (4.5 to 5 yrs in 10)

<sup>1</sup> Australian Bureau of Statistics (2006); <sup>2</sup> Geosciences Australia (1999); <sup>3</sup> National Land and Water Resources Audit (2000); <sup>4</sup> Australian National Committee on Large Dams (2004); <sup>5</sup> Australian National Committee - International Commission on Irrigation and Drainage (2005); <sup>6</sup> Murray Darling Basin Commission (2005); <sup>7</sup> State Agencies (2006); <sup>8</sup> Bureau of Rural Sciences (2007); <sup>x</sup> Incomplete



## BROUGHTON RIVER

### Modelled Annual Water Balance

Land Use Type	Area (sqkm)	Precipitation (ML)	Runoff (ML)	ET (ML)	Deep drainage (ML)	Irrigation (ML)	Return flow (ML)
Closed Forest	3	1,011	0	998	13	0	0
Open Forest	177	83,341	204	81,897	1,240	0	0
Plantation	34	22,286	46	21,927	314	0	0
Woodland	245	121,371	1,698	117,894	1,779	0	0
Woody Pasture	565	266,674	11,205	251,417	4,053	0	0
Shrubby Pasture	435	153,210	2,021	148,849	2,340	0	0
Pasture	4,110	1,795,269	80,179	1,688,745	26,345	0	0
Irrigated Pasture	5	2,844	207	2,596	41	3,066	294
Winter Crops	9,637	4,068,713	86,670	3,803,467	178,576	0	0
Summer / Fodder Crops	620	250,127	1,257	237,803	11,068	0	0
Irrigated Crops	35	16,462	209	15,544	709	23,861	2,325
Sugarcane	0	0	0	0	0	0	0
Irrigated Sugarcane	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0
Irrigated Cotton	0	0	0	0	0	0	0
Horticulture	4	2,523	53	2,436	35	0	0
Irrigated Horticulture	48	29,359	574	28,370	415	26,292	655
Bare Ground	36	14,296	1,345	12,737	214	0	0
Intensive Use	41	17,275	1,076	15,953	246	0	0
Water	101	40,122	3,040	36,485	597	0	0
<b>Entire Basin</b>	<b>16,376</b>	<b>6,984,497</b>	<b>189,783</b>	<b>6,566,731</b>	<b>227,983</b>	<b>53,218</b>	<b>3,274</b>
<b>NLWRA<sup>1</sup></b>	<b>16,290</b>	<b>n/a</b>	<b>65,000</b>	<b>n/a</b>	<b>n/a</b>	<b>11,417</b>	<b>n/a</b>
<b>AWRC<sup>2</sup></b>	<b>16,600</b>	<b>n/a</b>	<b>67,000</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

Data Sources: Land use data sourced from the Bureau of Rural Sciences. Precipitation data sourced from the Australian Bureau of Meteorology. All other data derived from the Bureau of Rural Sciences' steady-state annual water balance model.

<sup>1</sup>National Land and Water Resources Audit (2000); <sup>2</sup>Australian Water Resource Council (1987); n/a = Not available

# BROUGHTON RIVER

## Average Annual Water Resource Summary (GL)

### Water Supply

Runoff: <sup>1</sup>	190
Transfers: <sup>1, 2</sup>	0
Groundwater Sustainable Yield: <sup>3</sup>	3
<b>Total:</b>	<b>192</b>

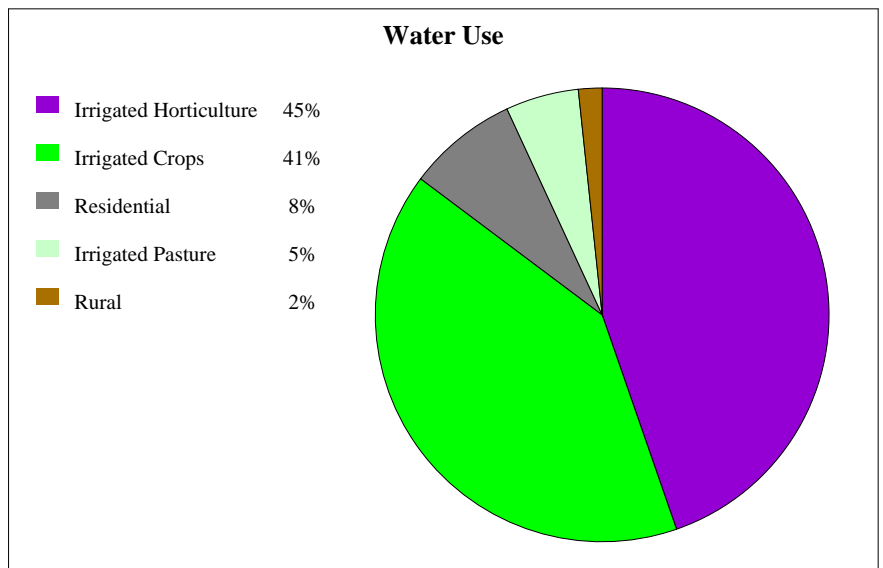
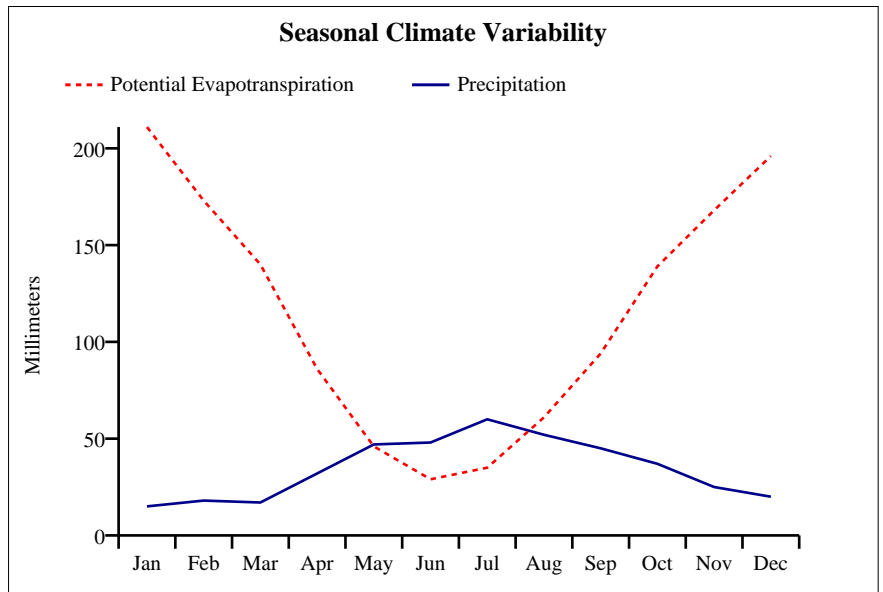
### Water Use

Irrigation: <sup>1</sup>	53
Residential: <sup>1</sup>	5
Commercial/Industrial: <sup>3</sup>	0
Rural (Stock/Domestic): <sup>3</sup>	<1
Transfers: <sup>1, 2</sup>	0
<b>Total:</b>	<b>59</b>

**Total Use (% of Supply):** 31%

### River Flows

Retained in Storage: <sup>~</sup>	<1
Environmental Flows:	Data being compiled
Transmission Losses: <sup>^</sup>	47
Return Flows: <sup>1</sup>	6
<b>Outflow:<sup>@</sup></b>	<b>110</b>



<sup>1</sup>Bureau of Rural Sciences (2007); <sup>2</sup>Australian Water Resource Council (1987); <sup>3</sup>National Land and Water Resources Audit (2000)

<sup>#</sup>Groundwater only; <sup>\*</sup> Surface water only; <sup>~</sup> 5% of total storage; <sup>^</sup> 25% of runoff; <sup>x</sup> incomplete

<sup>@</sup> Surface water (supply - use - retention in storage - transmission losses + environmental flows + return flows)

n/a = Not available