



# CALLIOPE RIVER

## River Basin Summary



**Population (2006):**<sup>1</sup> 25,195  
**Major Towns:**<sup>1</sup> Gladstone, Calliope  
**Major Rivers:**<sup>2</sup> Calliope River, Double Creek, Larcom Creek

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

Largest known storages: None  
 No. of storages: 0  
 Storage capacity (ML): 0

**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:**

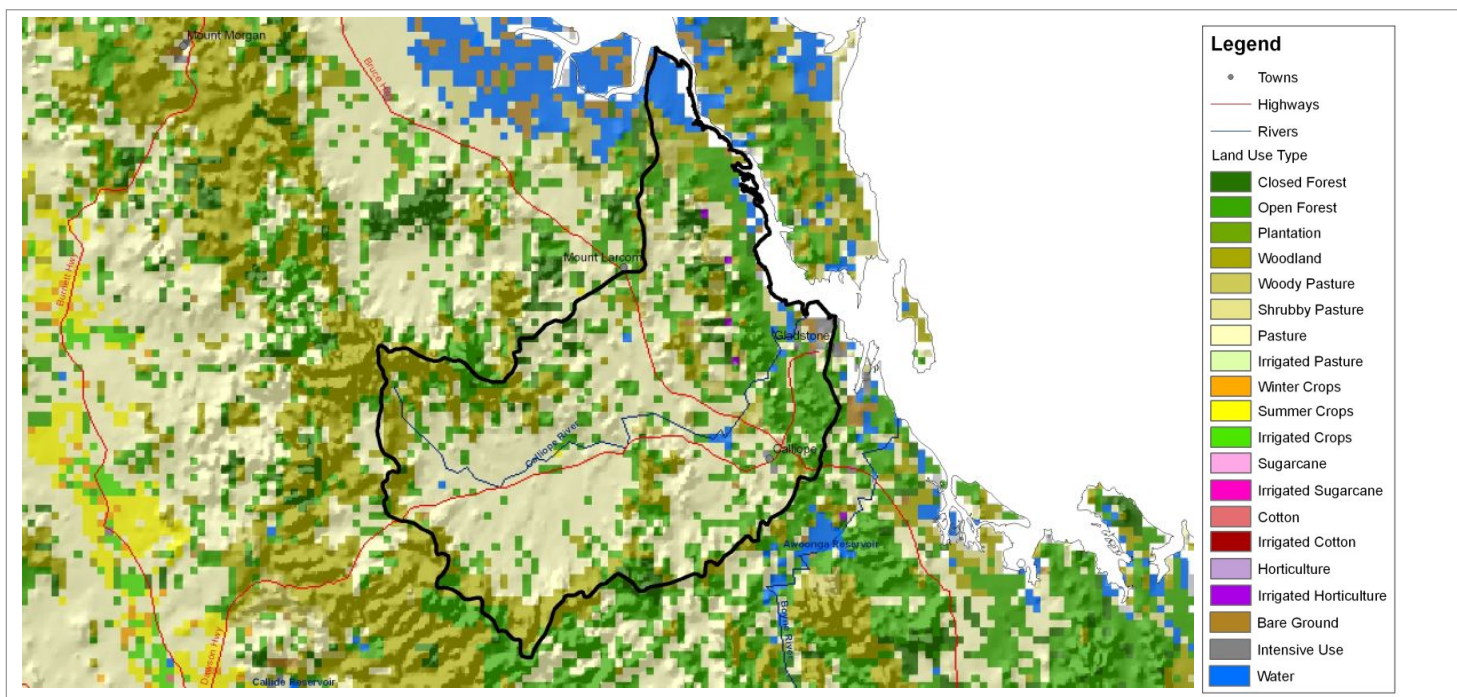
Number of production bores:<sup>7</sup> 340  
 Recharge rate (mm/year):<sup>8</sup> Data being compiled  
 Yield (ML/year):<sup>8</sup> Data being compiled  
 Extraction (ML/year):<sup>7</sup> Data being compiled

**Rainfall Reliability:**

Chance of receiving average seasonal rainfall:<sup>8</sup> Low (4 to 4.5 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

n/a = Not available



## CALLIOPE 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	74	71,747	4,617	66,076	1,054	0	0
Open Forest	541	508,333	39,458	461,441	7,433	0	0
Plantation	1	985	64	907	14	0	0
Woodland	338	307,187	39,727	262,993	4,466	0	0
Woody Pasture	71	67,779	14,548	52,246	985	0	0
Shrubby Pasture	8	7,356	1,484	5,752	121	0	0
Pasture	1,048	941,577	232,043	695,843	13,691	0	0
Irrigated Pasture	0	0	0	0	0	0	0
Winter Crops	0	0	0	0	0	0	0
Summer / Fodder Crops	1	868	160	670	38	0	0
Irrigated Crops	1	913	179	694	41	768	158
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	0	0	0	0	0	0	0
Irrigated Horticulture	4	4,187	560	3,565	61	2,498	167
Bare Ground	13	12,318	4,755	7,370	193	0	0
Intensive Use	10	9,482	2,947	6,388	147	0	0
Water	57	50,779	16,943	33,108	728	0	0
<b>Entire Basin</b>	<b>2,207</b>	<b>2,019,423</b>	<b>357,485</b>	<b>1,632,968</b>	<b>28,970</b>	<b>3,266</b>	<b>325</b>
<b>NLWRA<sup>1</sup></b>	<b>2,255</b>	<b>n/a</b>	<b>301,000</b>	<b>n/a</b>	<b>n/a</b>	<b>6,733</b>	<b>n/a</b>
<b>AWRC<sup>2</sup></b>	<b>2,260</b>	<b>n/a</b>	<b>340,000</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

# CALLIOPE RIVER

## Average Annual Water Resource Summary (GL)

### Water Supply

Runoff: <sup>1</sup>	357
Transfers: <sup>1, 2</sup>	0
Groundwater Sustainable Yield: <sup>3</sup>	4
<b>Total:</b>	<b>362</b>

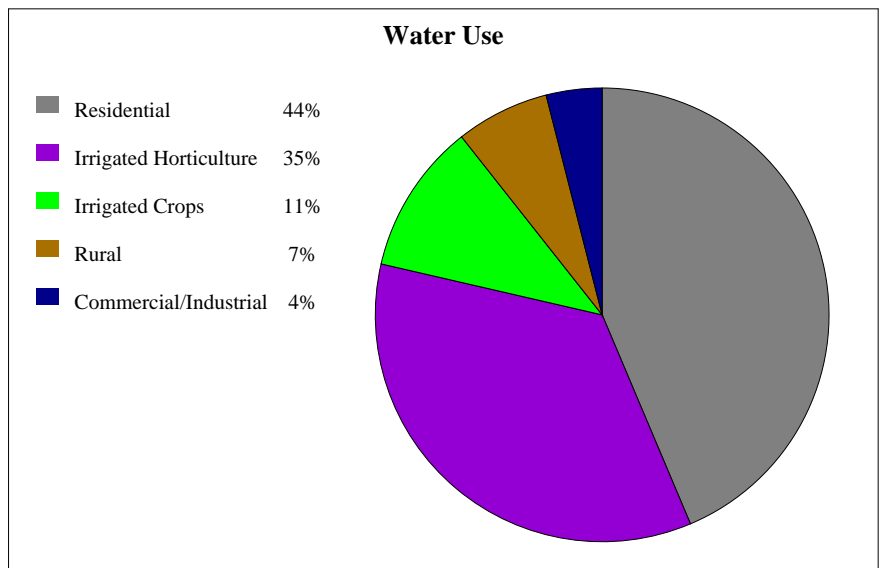
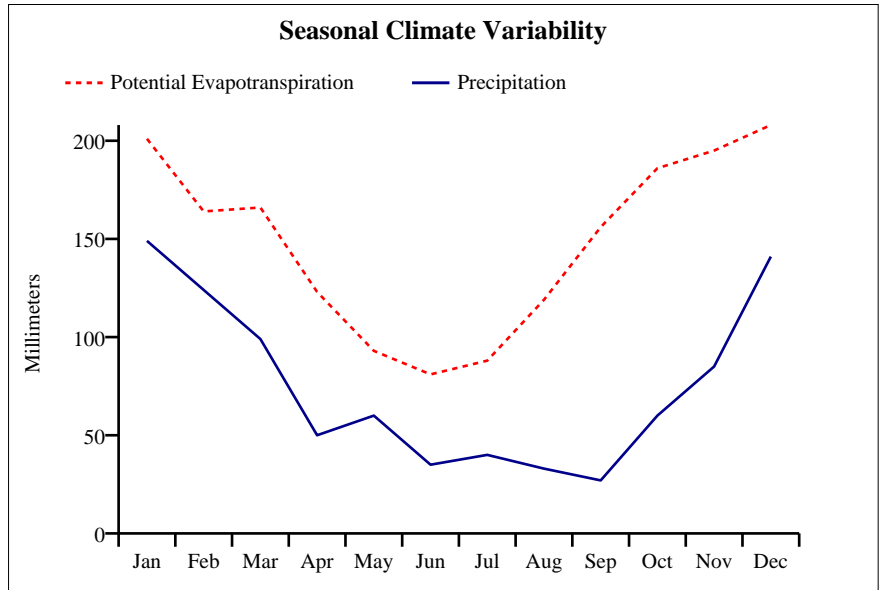
### Water Use

Irrigation: <sup>1</sup>	3
Residential: <sup>1</sup>	3
Commercial/Industrial: <sup>3</sup>	<1
Rural (Stock/Domestic): <sup>3</sup>	<1
Transfers: <sup>1, 2</sup>	0
<b>Total:</b>	<b>7</b>

**Total Use (% of Supply):** 2%

### River Flows

Retained in Storage:~	0
Environmental Flows:	Data being compiled
Transmission Losses: ^	89
Return Flows: <sup>1</sup>	2
<b>Outflow:<sup>@</sup></b>	<b>266</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)

#Groundwater only; \* Surface water only; ~ 5% of total storage; ^ 25% of runoff; x:incomplete

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

n/a = Not available