

SmartRivers Flow Report

February-March Flow Event 2020

Lower Balonne water balance

This report has been produced by SmartRivers in relation to the February – March 2020 flow in the Lower Balonne river system. The flow data contained in this report is produced using information from the 23 gauging stations in the Lower Balonne and measurements of water taken under legislated entitlements and/or licences. The following summary has been prepared to give a whole of system assessment of the flow event in the Lower Balonne river system.

SmartRivers believe it is important that the community and decision makers understand where 'all the water goes'. The provision of data must be timely, accurate and provided in a format that enables both understanding and critical decision making. The current publicly available data does not fully and expressly account for all sources of inflow, all volumes consumed by the rivers and floodplains such as through seepage and filling of waterholes and floodplain wetlands, and evaporation, nor does it assess the flow details from the Qld/NSW border to the Barwon-Darling Rivers (the 'end-of-valley' for the Lower Balonne). Note: In this report the end-of-valley flow is also known as the EOVF).

Collaborating for change

SmartRivers would like to acknowledge the efforts of all levels of government for ongoing discussions and planning for 'whole of system' end of valley flow reporting possibilities which continues to be a work in progress.

Note all volumes contained in this report are in Gigalitres (GL).



Understanding the February–March 2020 Flow Data

The data in Table 1 and 2 shows that 56% of the flood volume is consumed by the natural components of the system namely watercourse replenishment, floodplain inundation and filling Narran Lake.

An assessment has been undertaken of the flow in the Lower Warrego River for the same event. In a similar way that the inflow into the Lower Balonne River is measured upstream of the extensive floodplains, the flow measurement at Cunnamulla is at the top of another extensive floodplain. The Warrego River data shows that 94% of the flood volume is consumed by the natural components (see table 3). Only 6% of the volume reaches the Darling River system.

Table 1
Lower Balonne Flows, Diversions and Consumptive Use

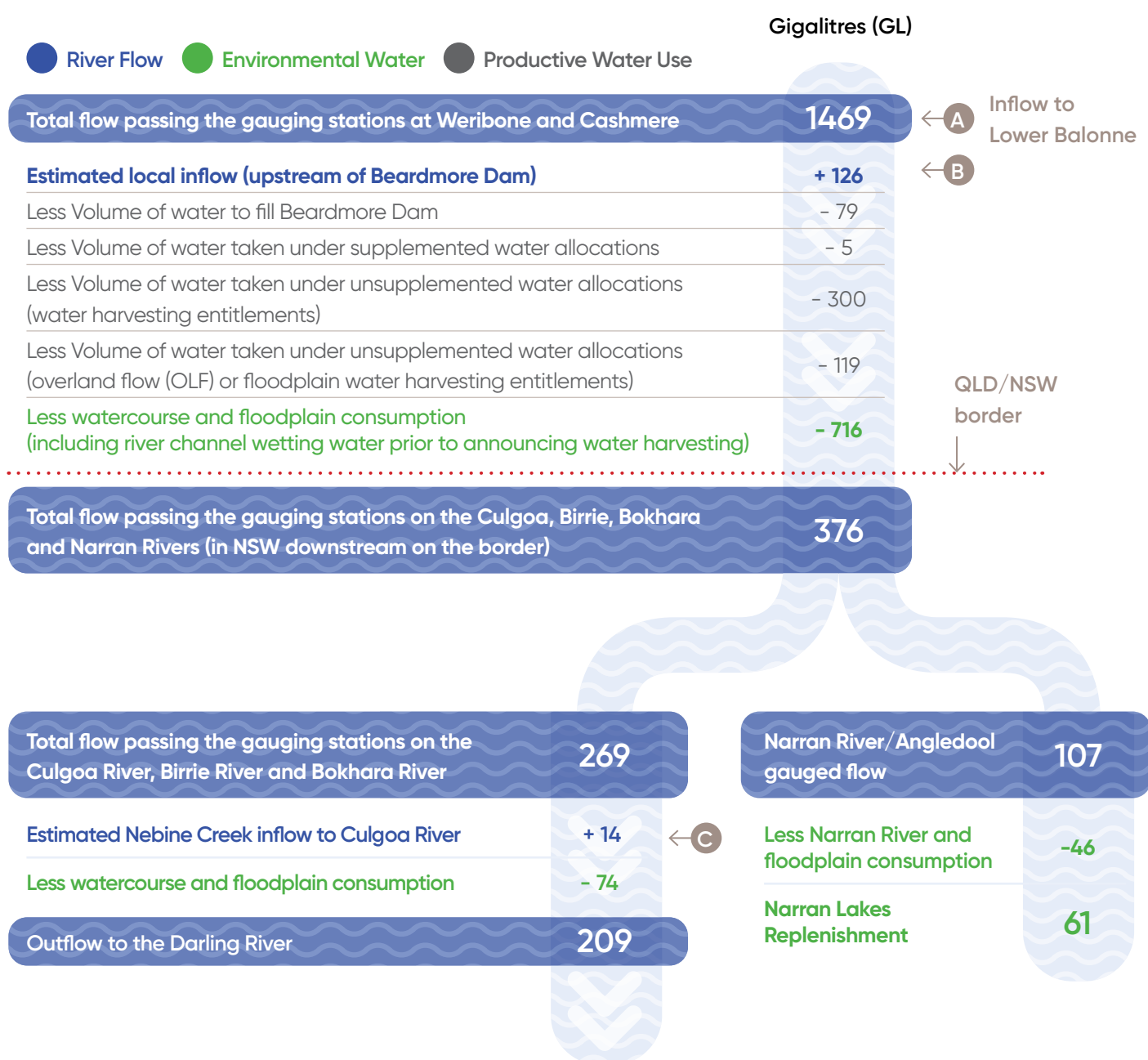


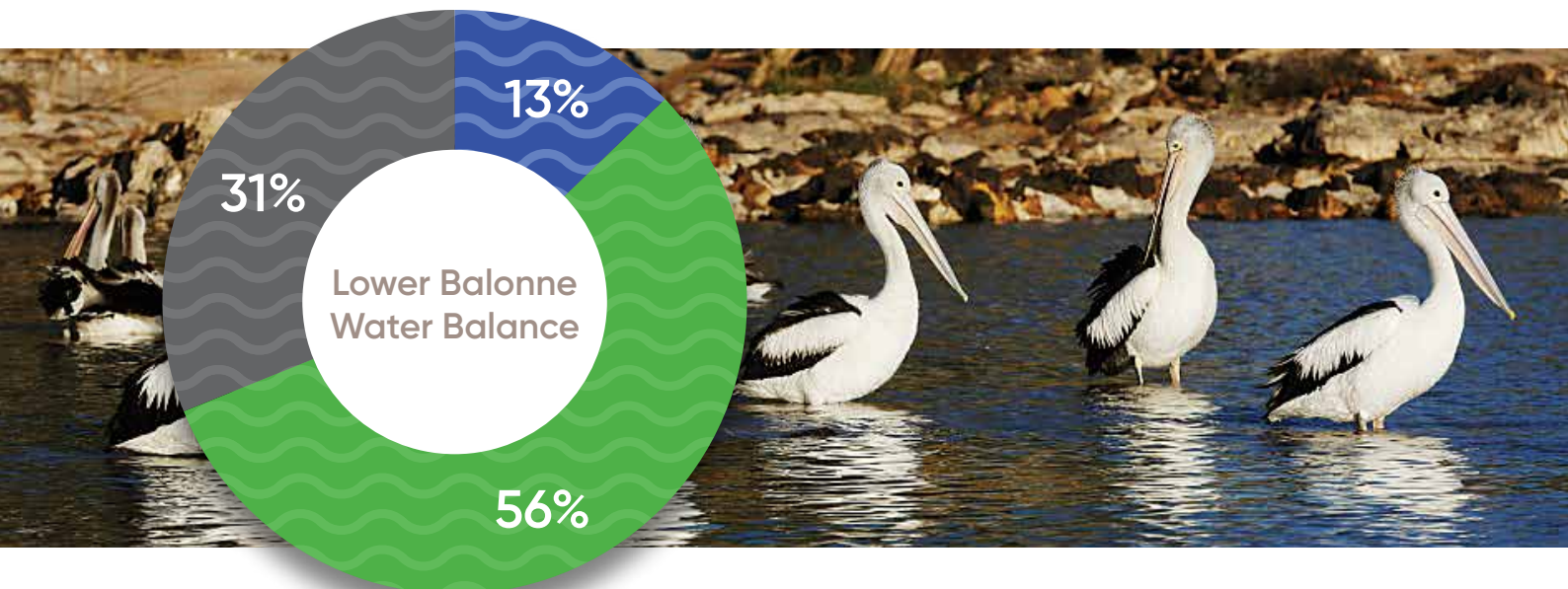
Table 2: Lower Balonne Water Balance

		Gigalitres (GL)	% of LB inflow
Lower Balonne - total inflow (A+B+C) See Table 1		1,609	
St George gauge – 1,442 GL / 90% of LB inflow (Refer to Table 2a)			
Supplemented take (under water allocations from the Beardmore Dam regulated system)		- 84	
Unsupplemented take (under water harvesting entitlements)		- 300	
Unsupplemented take (under OLF licences)		- 119	31%
Watercourse and floodplain consumption	QLD	- 716	
Narran River / Angledool gauged flow	NSW	- 107	
Watercourse and floodplain consumption	NSW	- 74	56%
Lower Balonne River System EOVF - Outflow		209	13%

Table 2a: St George Gauge

	Gigalitres (GL)	% of LB inflow
(A+B) See Table 1	1,595	
Supplemented take (under water allocations from the Beardmore Dam regulated system)	- 84	
Unsupplemented take (under water harvesting entitlements) from the Balonne River - Zone LBU-01	- 42.8	
Unsupplemented take (under water harvesting entitlements) from the Thuraggi W/C - Zone LBU-09	- 26.5	
St George gauge (Jack Taylor Weir)	1,442	90%

● River Flow
 ● Environmental Water
 ● Productive Water Use



● River Flow ● Environmental Water

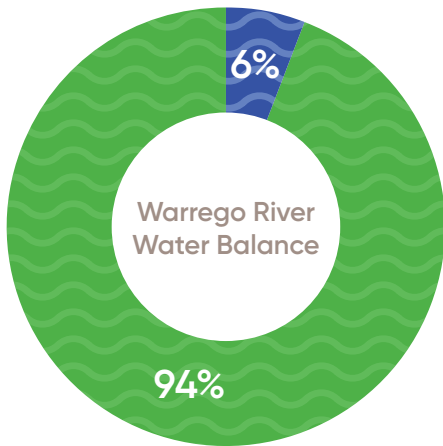
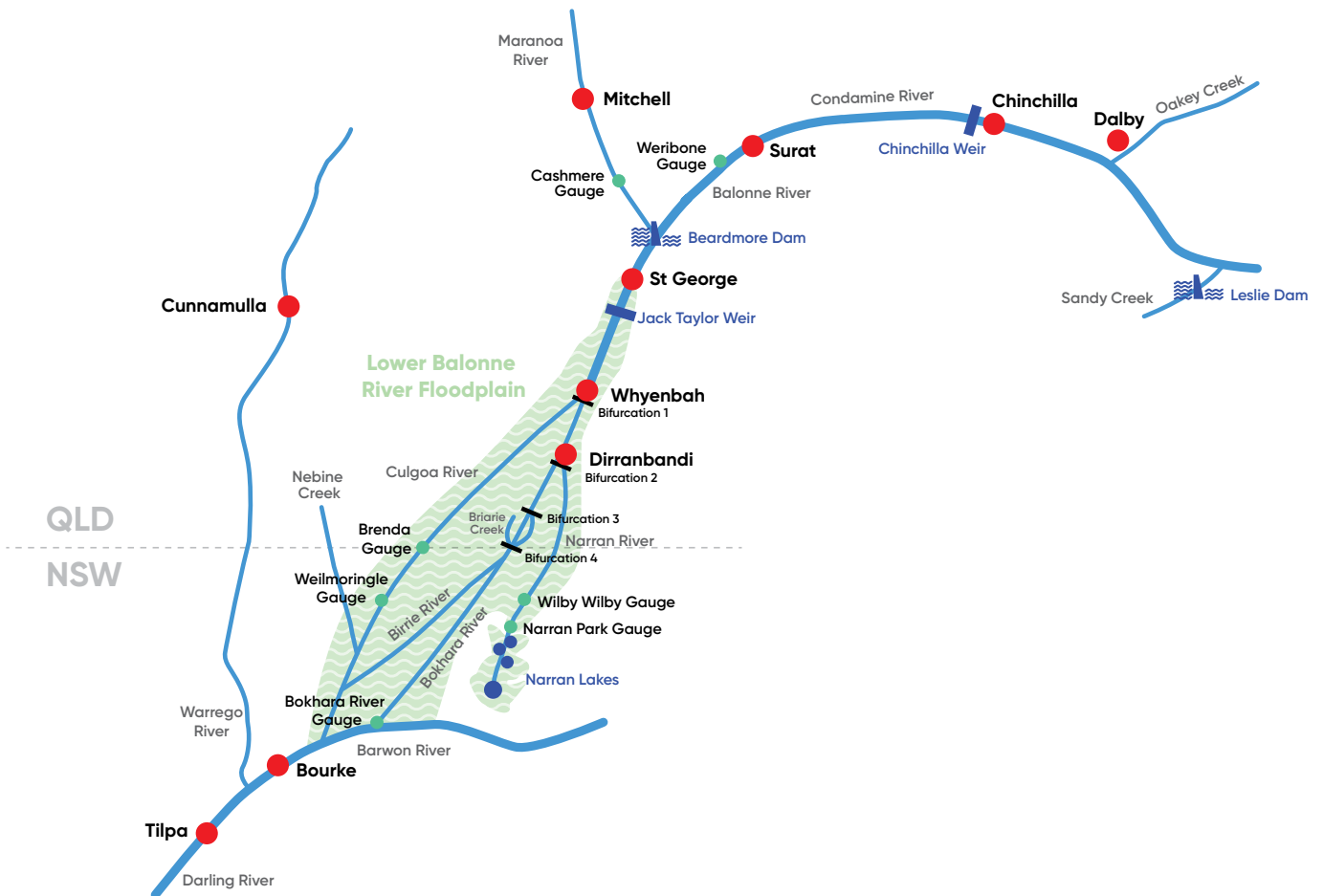


Table 3: Warrego River Water Balance

	Gigalitres (GL)	% of LB inflow
Warrego River - Cunnamulla gauge	1,092	
Regulated	0	
Water harvesting	-3	
OLF and licences	0	0%
Watercourse and floodplain consumption	-1,023	94%
System Outflow	66	6%

Schematic Map of the Condamine-Balonne River System



Disclaimer

SmartRivers produces this information to the best of its ability using publicly available data. SmartRivers accepts no responsibility for the reliance on this data and anyone relying on this information does so at their own discretion.