

ACT 2014/15 Reporting on s71.

2014-15 Conditions

Based on Canberra Airport readings the ACT experienced a lower than average rainfall for the period 2014-15 (550.2 mm) and about average maximum and minimum temperatures. The average long term rainfall at the Canberra Airport gauge is 618 mm. However, rainfall can be quite localised throughout the ACT with readings taken at Tyson Street in Ainslie, within 5 km of the airport gauge, being an almost additional 200 mm as compared to the official gauge for the 2014-15 period.

Diversions and Returns

The ACT recorded a total net surface water diversion of ~17 GL during the 2014-15 period. This result provides a slight decrease of water use within the Territory of 1.965 GL as compared to last year. The ~17 GL net consumed represents only 42% of the water available to the ACT under the current 40.5 GL Sustainable Diversion Limit. Note, the ACT has contributed a further 2 GL in 2015 to The Living Murray Initiative which needs to be reflected in the MDBA accounting. When the MDBA accounting processes are finalised the ACT will manage, and report on, a new SDL volume of 42.5 GL.

Surface Water		Annual Entitlement	Annual Diversion	%
		GL	GL	GL
Diversions	ICON diversions	71.000	47.447	66
	Private diversions	2.116	1.180	57
	LBG diversions	1.582	0.518	28
	Combined SW/GW diversions	2.402	0.922	38
	Commonwealth diversions	1.424	0.473	33
Total Diversion		77.100	50.067	65
Returns	LMWQCC return		29.650	
	QSTP return		3.293	
	Total Returns		32.943	
Net Diversion	(Diversions – Returns)	40.5	17.125	42
Interceptions	Runoff dams	0.1	0.1	100
	Commercial plantations	1.1	6.5	59
Baseline Diversion Limit		52.5		
Sustainable Diversion Limit		47.6	23.725	50

The volume of Commonwealth water drawn from Lake Burley Griffin was ~.47 GL (35%) of the 1.36 GL entitlements issues within the Central Molonglo catchment. Note: the ACT does not agree that Commonwealth water use should be included in the ACT SDLs.

The ACT recorded a total net groundwater diversion of ~0.6 GL consumed during the 2014-15 period. This result provides a slight increase in groundwater use within the territory of

0.16 GL as compared to last year. The ~0.6 GL consumed represents only 20% of the water available to the ACT under the 3.16 GL Sustainable Diversion Limit.

Groundwater		Annual Entitlement	Annual Diversion	%
		GL	GL	
Diversions	Private diversions	1.036	0.546	53
	Commonwealth diversions	0.566	0.079	14
	Total Diversion	1.602	0.625	39
Baseline Diversion Limit		1.70		
Sustainable Diversion Limit		3.16	0.625	20

The 1.42 GL of Commonwealth surface water entitlements are drawn from the catchments of Central Molonglo (LBG), Paddys and Ginninderra. The Commonwealth surface water use was .473 GL (33%) of the total water available. Similarly, the Commonwealth groundwater entitlements total 0.566 GL and water use was .079 GL (14%). Note: the ACT does not agree that Commonwealth water use should be included in the ACT SDLs.

Entitlements

The ACT Environmental Protection Authority (EPA) is responsible for the management of entitlements within the ACT. There was no change in the number or volume of entitlements by ICON Water and only a small difference of private entitlements as compare to the previous year. The responsibility to manage entitlements held by the Commonwealth was transferred from the National Capital Authority (NCA) to the ACT EPA throughout the 2014-15 reporting period. The NCA provided entitlement and water use data from 1 July to 17 December 2014 and the ACT EPA from 17 December 2014 to 30 June 2015.

There are no further combined surface water/groundwater entitlements to be issued. These combined entitlements are being phased out on transfer or sale of property. The change during the 2014-15 period included a reduction of three entitlements with a volume of 20.5 ML.

Entitlements		Entitlements issued for 2014-15	Entitlement volume GL
Surface water	ICON entitlements	7	71.00
	Private entitlements	83	2.116
	Commonwealth entitlements	8	1.484
	Entitlements	98	74.60
Groundwater	ICON entitlements	0	0
	Private entitlements	165	1.03
	Commonwealth entitlements	6	0.56
	Entitlements	171	1.59
SW/GW	Private entitlements	30	2.40
	Entitlements	34	2.46

Trade

The 2014-15 period saw a small number of entitlements exchanged within the ACT which increased the number of entitlements issued from 79 to 83, however, the entitlement volume attached to those decreased by 87 ML.

Trade (within ACT)		Entitlements exchanged 2014-15	Entitlement volume GL
Surface water	ICON	0	0
	Private	+4	-0.87
	Commonwealth	N/A	N/A
	Entitlements exchanged	+4	-0.87
Groundwater	ICON	0	0
	Private	+1	-0.009
	Commonwealth	N/A	N/A
	Entitlements exchanged	+4	-0.009
SW/GW	Private	-3	-0.205
	Entitlements exchanged		

There was no interstate water entitlements traded during the 2014-15 period.

Interstate Trade		Entitlements exchanged 2014-15	Entitlement volume GL
Surface water	ICON	0	0
	Private	0	0
	Commonwealth	N/A	N/A
	Entitlements exchanged	0	0
Groundwater	ICON	0	0
	Private	0	0
	Commonwealth	0	0
	Entitlements exchanged	0	0

Storages

The calculation of dam storage levels have changed following the completion of the Enlarged Cotter Dam. The capacity of the ACT's four dams, Googong, Corin, Bendora and the new Enlarged Cotter dam, combines to a total of 277.841 GL, an increase of 35%. The increase in total storage capacity coupled with relatively stable climatic conditions has maintained an even storage throughout the year. At 30 June 2015 the total storage volume was 220.8 GL, which equates to 79% storage capacity.

ACT Model

Water restrictions have not been imposed throughout the years 2011-2014 and there were also no water restrictions imposed during 2014-15 period. Therefore, the ACT's mandatory regime of permanent water conservation measures continues to apply.

The model output, climate adjusted cap and net abstraction have been reliable throughout the last three reporting cycles. This demonstrates that the ACT continues the practice of good water planning and water management by using only 33% of resources against the available Cap volume. It also demonstrates a cultural shift in the behaviour of the ACT community to manage a changing climate.

Held Environmental Water

The ACT did not hold any environmental water during the 2014-15 period. However, the ACT's contribution to The Living Murray (2 GL) and the SDL Shared Reduction Amount (4.9 GL) were fulfilled by providing water entitlements to the Commonwealth.

Planned Environmental Water

Environmental flows are a mandatory requirement under entitlement licence held by ICON Water in the Cotter catchment to enable flushing of sediment from pools between Corin Dam and Bendora Dam and between Bendora Dam and the Cotter Dam. An environmental flow of 1.1 GL was planned and released over a one week period in July 2014 between and throughout these two reaches.

Similarly, ICON Water is required under licence to provide environmental baseflows from the four dams to replicate natural flows throughout the year. The ICON licence stipulates that 12.8 GL of environmental flow be released from Corin Dam during 2014-15 to maintain and improve river health, 19.1 GL from Bendora Dam, 15.0 GL from Cotter Dam and 4.2 GL from Googong Dam. For 2014-15 ICON meet all environmental watering requirements under licence.