

General Information

River Name	Leader Water	Catchment Area (km ²)	239
Station Name	Earlston	SAAR (mm) 61-90	852
Station Number	21015	Mean Annual Rain (mm) 62-91	868
Grid Reference	NT565388	Mean Annual PE (mm) 62-91	516
EA Region	SEPA-SE	Observed flow record	1966 to 2005



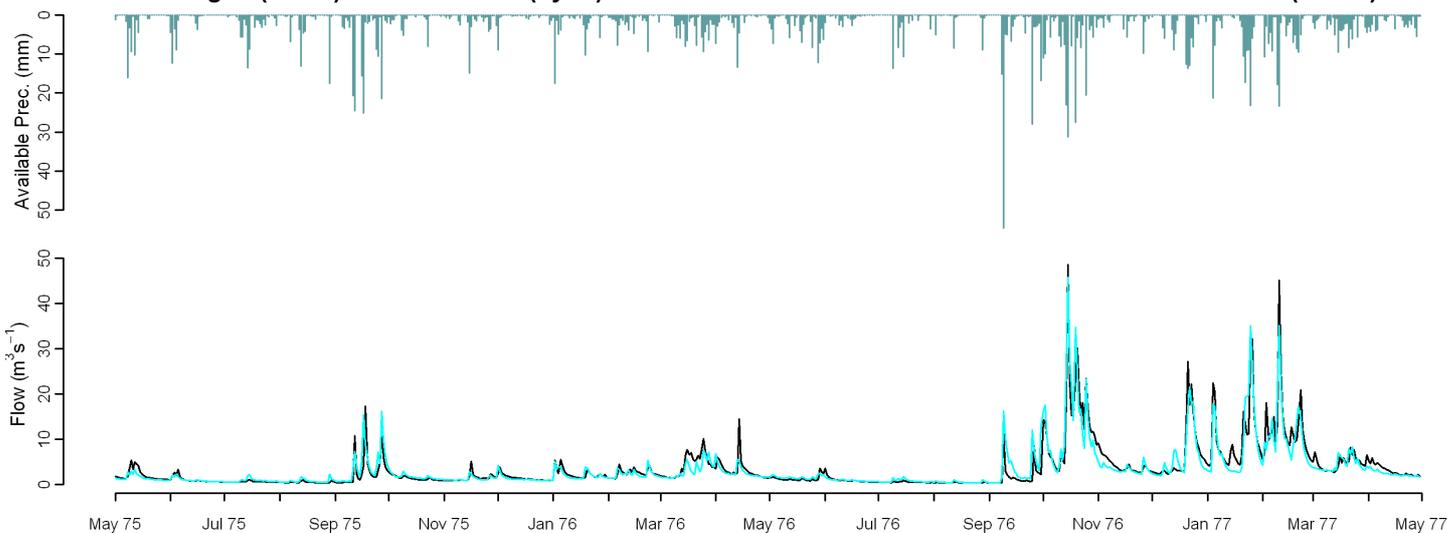
Observed Data

Comparison of gauged and simulated flow

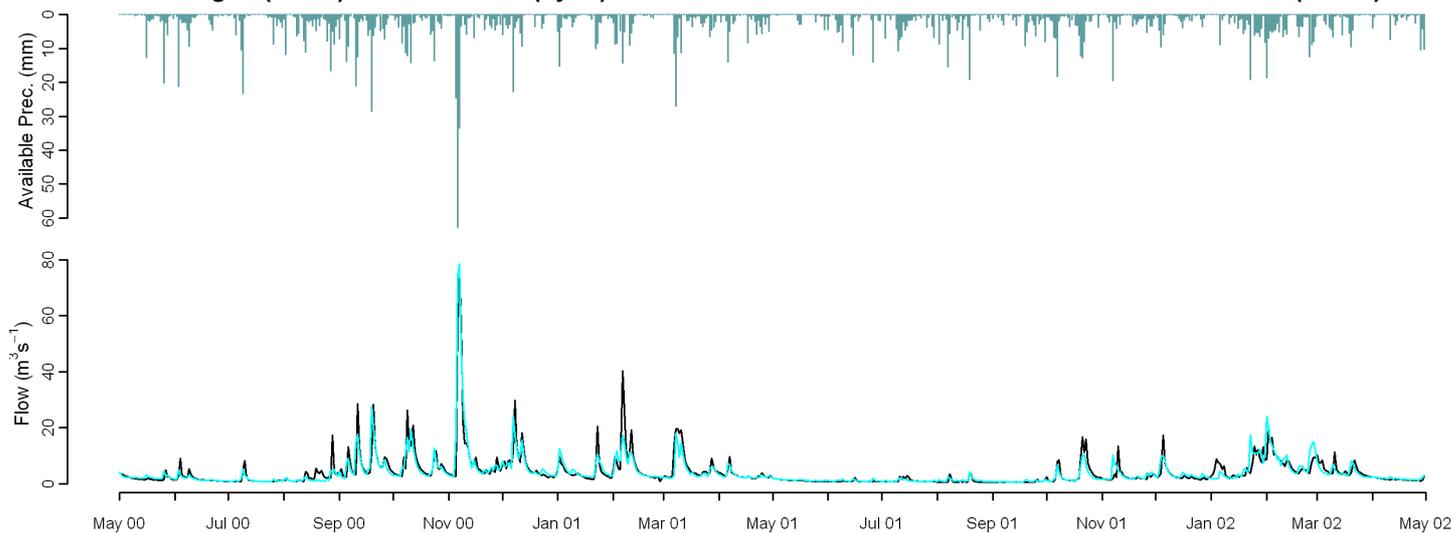
Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	0.7	-2.7	-0.5	-5.5	-8.6	-5.7	-1.5	12.0	15.1	17.5	8.7	3.4	1.9	0.75
Performance Band	1	1	1	1	1	1	1	2	2	2	1	1	1	1
MORECS (1962-1991)	-0.8	-4.4	-3.5	-6.2	-7.2	-8.1	5.8	16.4	19.2	21.3	7.6	-2.9	-3.4	0.75
	Q90	Q75	Q50	Q25	Q5	RP2		RP5		RP10		RP20		
MORECS (1971-2005)	20.1	21.0	4.7	-6.2	2.6									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	24.4	23.8	3.8	-9.9	1.3									

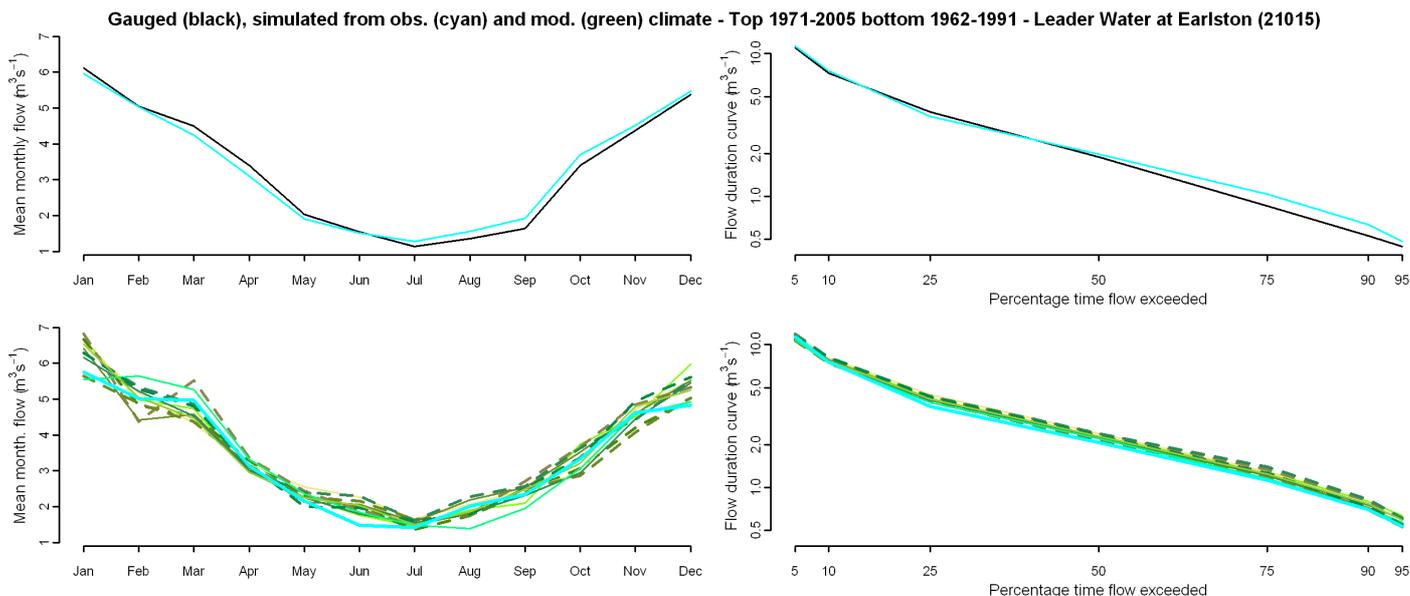
Gauged (black) and simulated (cyan) flows from observed climate - Leader Water at Earlston (21015)



Gauged (black) and simulated (cyan) flows from observed climate - Leader Water at Earlston (21015)



Comparison of gauged and simulated flow (observed and modelled climate)



Percentage difference between flow simulated from observed climate and Future Flows Climate

	afgcx	afixa	afixc	afixh	afixi	afixj	afixk	afixl	afixm	afixo	afixq
Annual	7	4	9	11	4	1	3	10	2	7	3
January	17	11	14	18	11	4	4	12	-2	7	16
April	-4	-2	6	12	0	1	-2	5	7	4	-4
July	6	7	21	9	11	8	13	15	5	12	7
October	12	-5	-12	15	3	-13	1	2	-7	2	0
Q90	16	8	5	15	-2	-2	6	17	0	0	9
Q75	14	12	15	21	4	4	9	26	2	13	10
Q50	10	10	15	17	7	5	9	17	7	11	9
Q25	13	10	20	17	10	8	11	20	8	16	12
Q5	1	-6	0	5	-1	-4	-3	4	-4	1	-4
RP2	-1	-1	-6	3	14	-6	-1	-1	-1	0	-4
RP10	-13	-9	-18	-15	0	-18	-22	-8	-7	-5	2

Climate change graphs for 2050s

