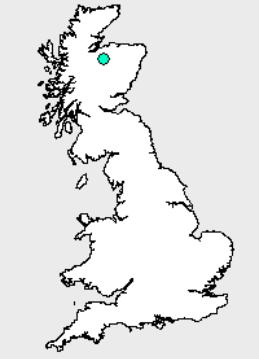
Catchment Fact Sheet 8009 Future Flows and Groundwater Levels

General Information

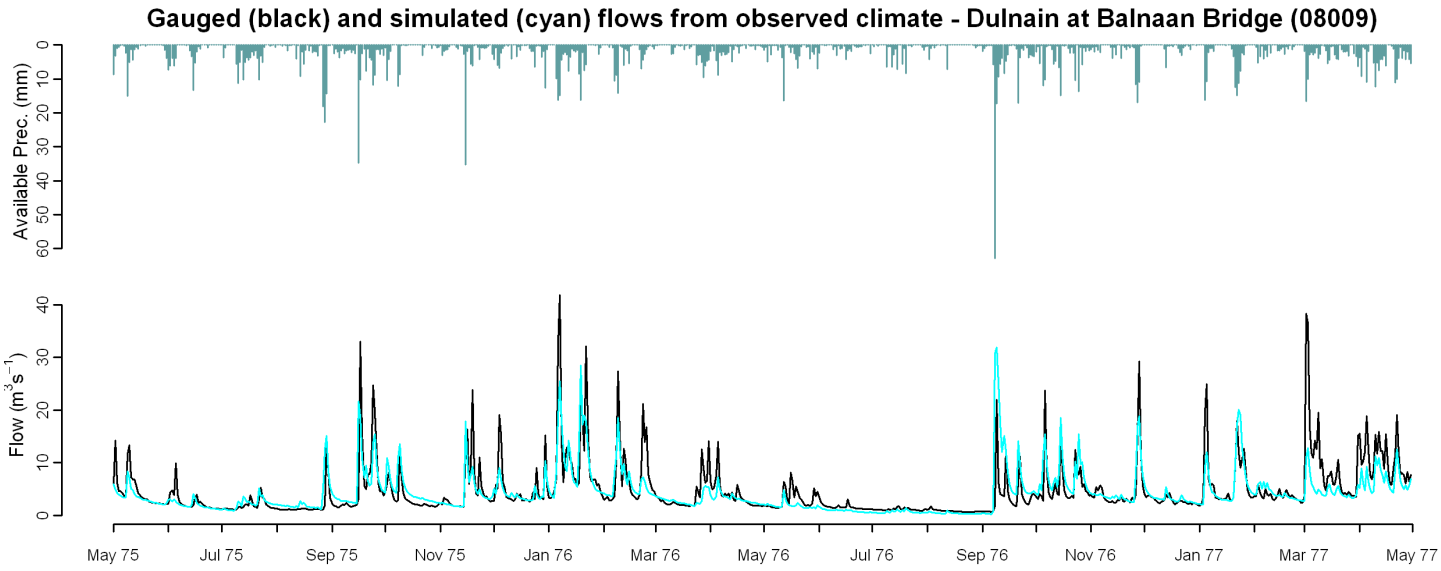
River Name	Dulnain	Catchment Area (km2)	272
Station Name	Balnaan Bridge	SAAR (mm) 61-90	1013
Station Number	8009	Mean Annual Rain (mm) 62-91	1039
Grid Reference	NH977247	Mean Annual PE (mm) 62-91	477
EA Region	SEPA-NW	Observed flow record	1961 to 2005

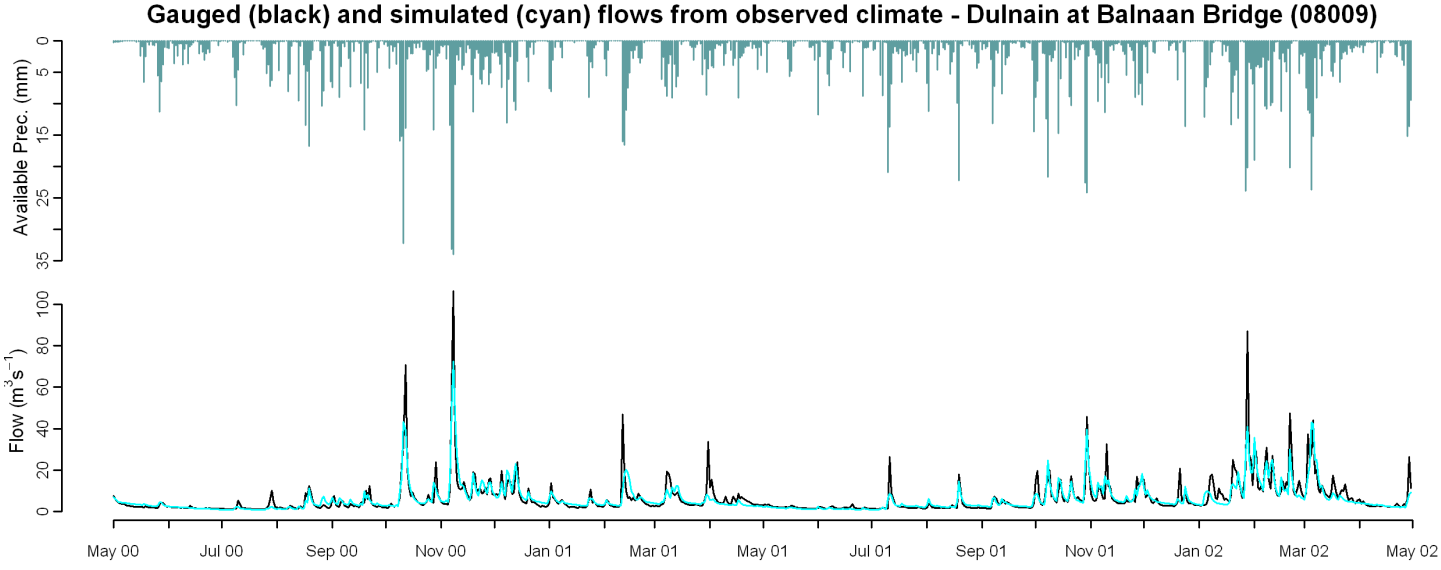


Observed Data Comparison of gauged and simulated flow Model used: CERF

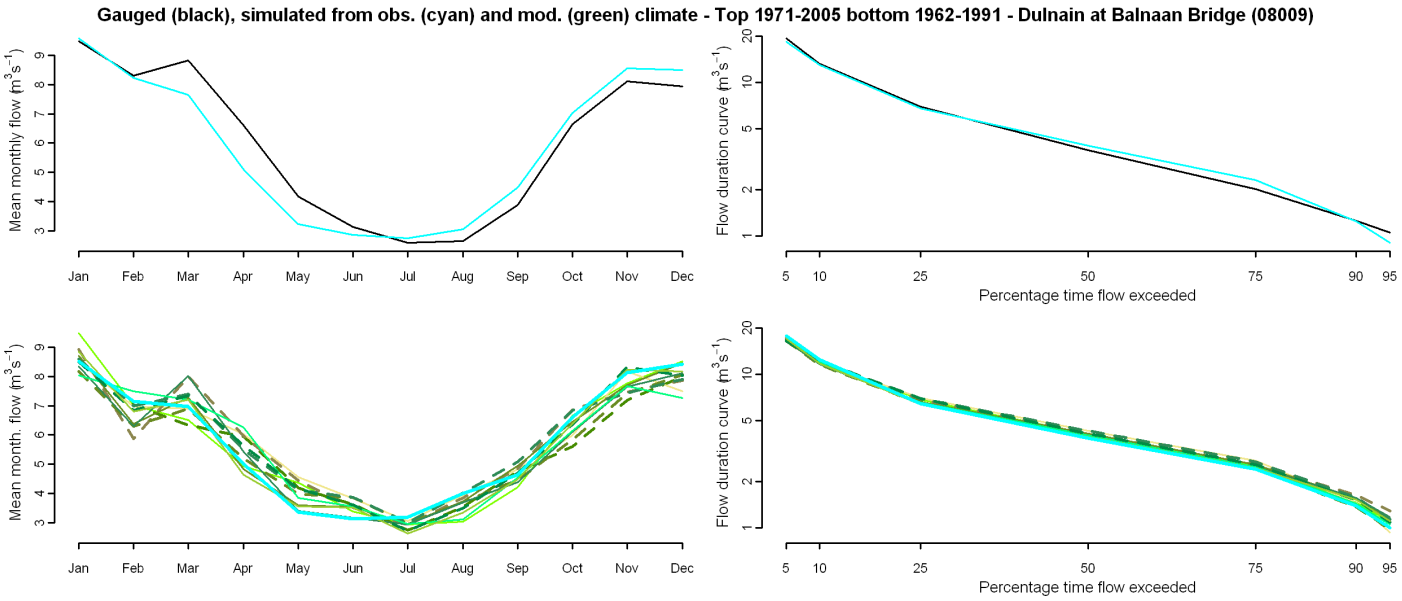
	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-1.9	1.1	-1.0	-13.3	-22.8	-22.7	-8.7	6.1	15.3	15.3	5.6	5.6	6.9	0.66
Performance Band	1	1	1	2	2	2	1	2	2	2	1	1	1	1
MORECS (1962-1991)	-2.8	2.2	0.5	-16.6	-24.6	-27.0	-6.7	14.6	15.7	11.6	6.0	6.1	2.8	0.64

	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20
MORECS (1971-2005)	-1.0	14.6	7.6	-2.2	-4.7				
Performance Band	1	1	1	1	1				
MORECS (1962-1991)	-1.6	10.1	4.9	-4.2	-1.9				





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	1	1	6	4	0	-2	-1	4	-1	3	0
January	10	4	0	5	3	0	-4	-2	-9	-1	8
April	-3	19	23	16	-3	3	7	15	24	18	-8
July	-6	-12	1	-5	-6	-11	-4	-6	-8	-14	-17
October	0	-10	-8	11	-1	-13	-3	1	-5	-3	5
Q90	6	0	5	19	6	-1	9	12	0	7	11
Q75	5	2	15	9	5	0	2	11	1	5	2
Q50	6	4	12	6	6	2	2	11	3	7	2
Q25	6	3	10	6	2	0	0	8	1	7	-1
Q5	-7	-6	-6	-3	-8	-7	-6	-6	-4	-8	-4
RP2	-2	3	1	5	11	3	4	-8	-3	-1	12
RP10	7	4	7	1	15	2	13	11	-4	9	23

Climate change graphs for 2050s