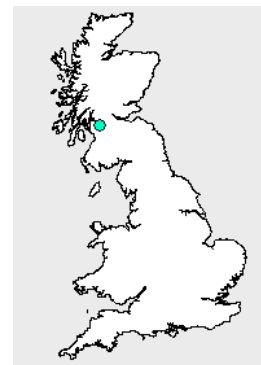


## General Information

River Name	White Cart Water	Catchment Area (km2)	235
Station Name	Hawkhead	SAAR (mm) 61-90	1308
Station Number	84012	Mean Annual Rain (mm) 62-91	1331
Grid Reference	NS499629	Mean Annual PE (mm) 62-91	525
EA Region	SEPA-SW	Observed flow record	1963 to 2005



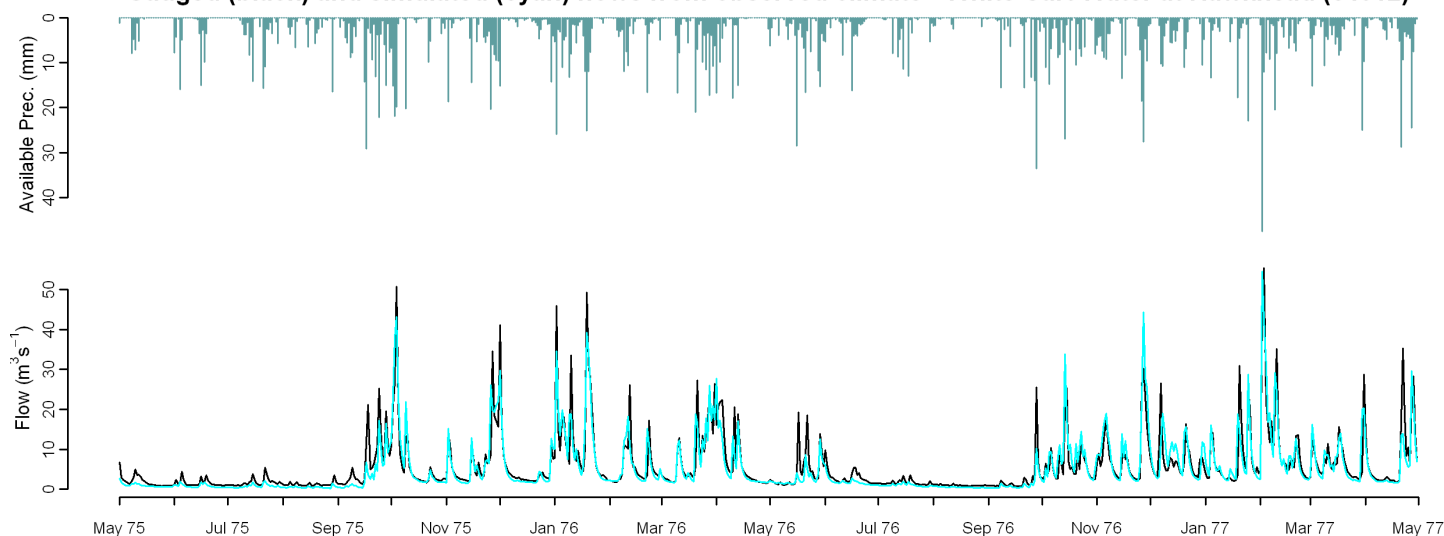
## Observed Data

## Comparison of gauged and simulated flow

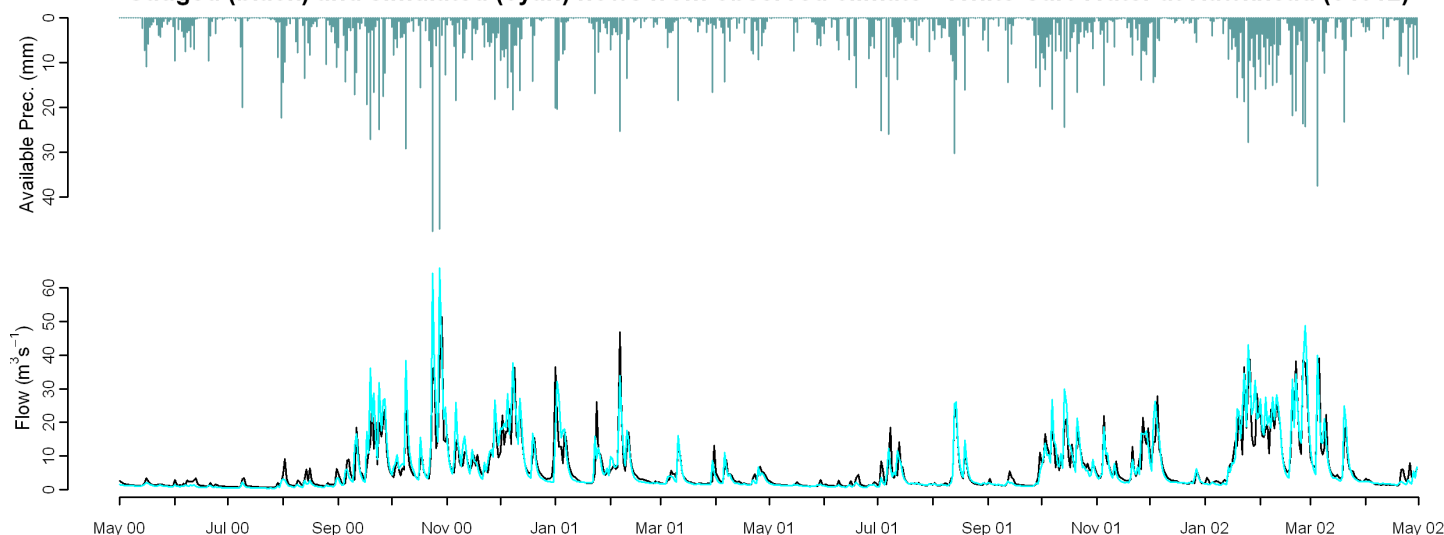
## Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-1.6	3.8	3.4	-0.7	-13.8	-26.1	-30.5	-30.4	-21.9	-9.9	7.8	5.0	6.6	0.82
Performance Band	1	1	1	1	1	2	3	3	2	1	1	1	2	1
MORECS (1962-1991)	-3.3	3.8	3.1	-1.6	-13.1	-24.6	-28.9	-38.9	-28.7	-8.9	5.0	5.2	5.3	0.82
	Q90	Q75	Q50	Q25	Q5	RP2		RP5		RP10		RP20		
MORECS (1971-2005)	-23.0	-12.5	-25.7	1.3	6.4									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	-24.7	-17.6	-25.5	-0.3	4.0									

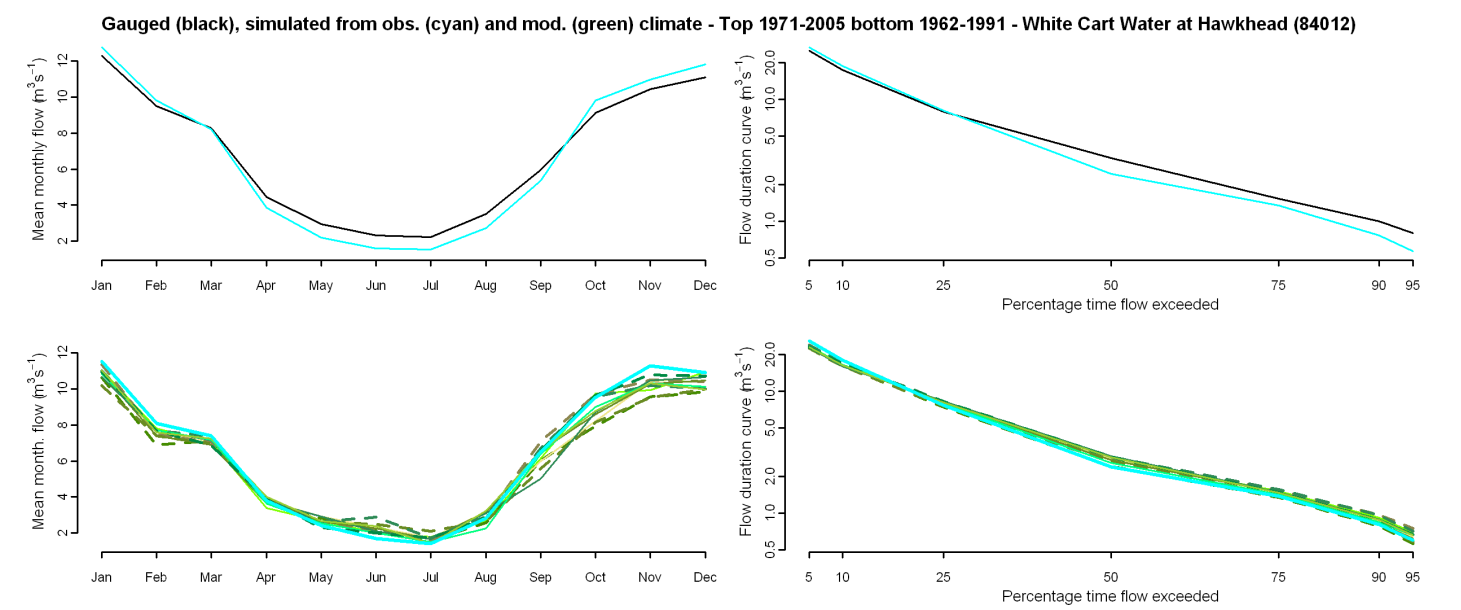
Gauged (black) and simulated (cyan) flows from observed climate - White Cart Water at Hawkhead (84012)



Gauged (black) and simulated (cyan) flows from observed climate - White Cart Water at Hawkhead (84012)



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	-5	-1	3	-3	-6	-3	1	-3	-1	-2
January	-4	-5	-4	-4	-5	-8	-10	-2	-5	-8	-1
April	-8	2	0	12	-3	1	2	2	-5	6	4
July	28	20	19	18	16	26	21	22	8	19	-1
October	2	-11	-17	5	-9	-14	-1	-1	-5	2	-3
Q90	15	0	6	21	-2	-1	9	18	6	6	9
Q75	11	-1	5	13	4	-1	7	13	3	5	6
Q50	16	2	14	21	12	8	23	21	8	17	18
Q25	6	-1	6	10	4	-2	8	9	5	6	6
Q5	-10	-12	-11	-7	-11	-13	-12	-8	-11	-12	-12
RP2	-8	-6	-8	-3	-6	-7	-11	-3	-2	-5	-7
RP10	-6	-8	-4	-1	-3	-7	-3	3	-1	5	-5

Climate change graphs for 2050s

