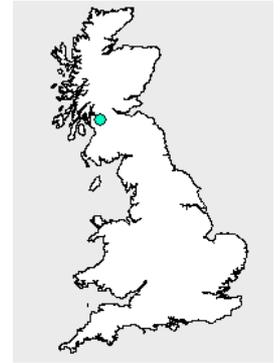


General Information

River Name	White Cart Water	Catchment Area (km ²)	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



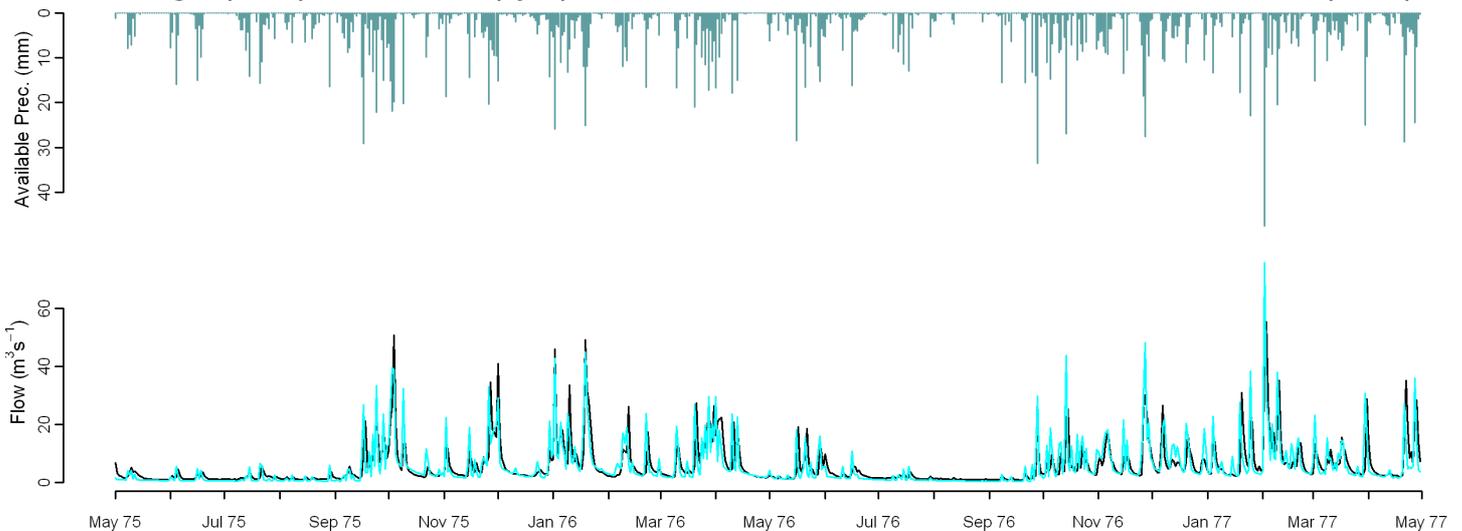
Observed Data

Comparison of gauged and simulated flow

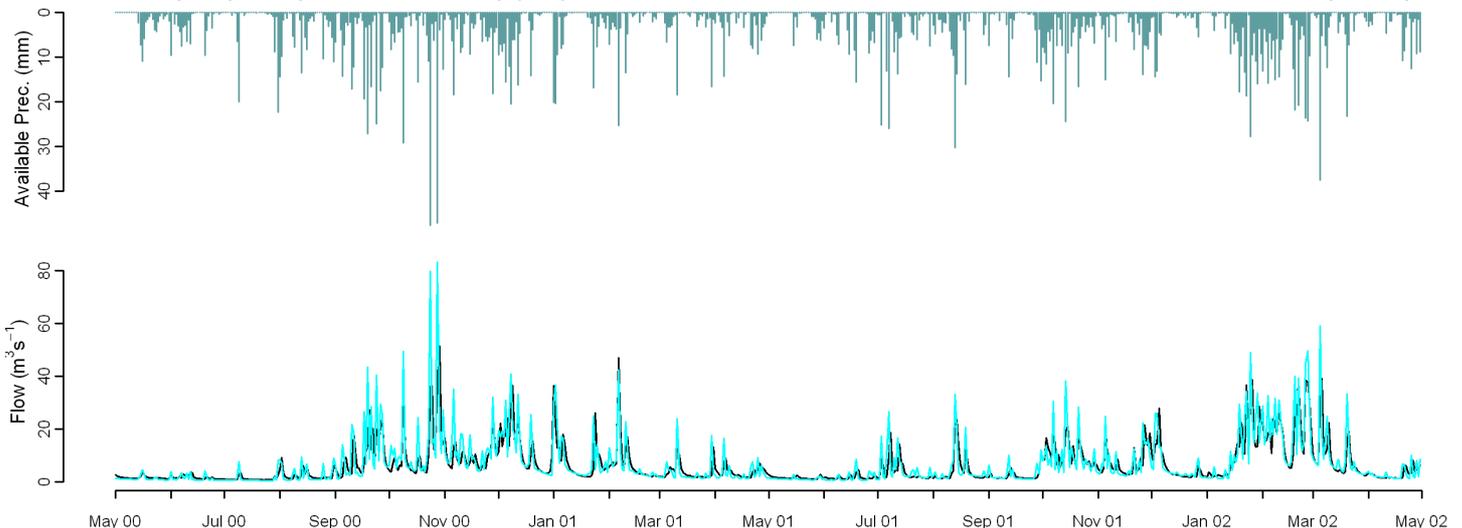
Model used: PDM

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	1.5	3.7	4.2	-0.4	-8.9	-20.5	-13.4	-10.2	-4.9	1.0	7.6	5.8	6.2	0.63
Performance Band	1	1	1	1	1	2	2	2	1	1	1	1	1	2
FAO (1962-1991)	2.7	5.0	4.7	-0.2	-7.0	-11.1	-11.5	-15.4	-7.9	2.6	10.6	8.8	8.1	0.61
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	-32.8	-17.5	-8.3	1.6	8.4	4.6	-2.5	-6.1	-8.7					
Performance Band	2	1	1	1	1									
FAO (1962-1991)	-33.2	-20.7	-4.9	4.2	8.4	0.1	-3.6	-5.0	-5.7					

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

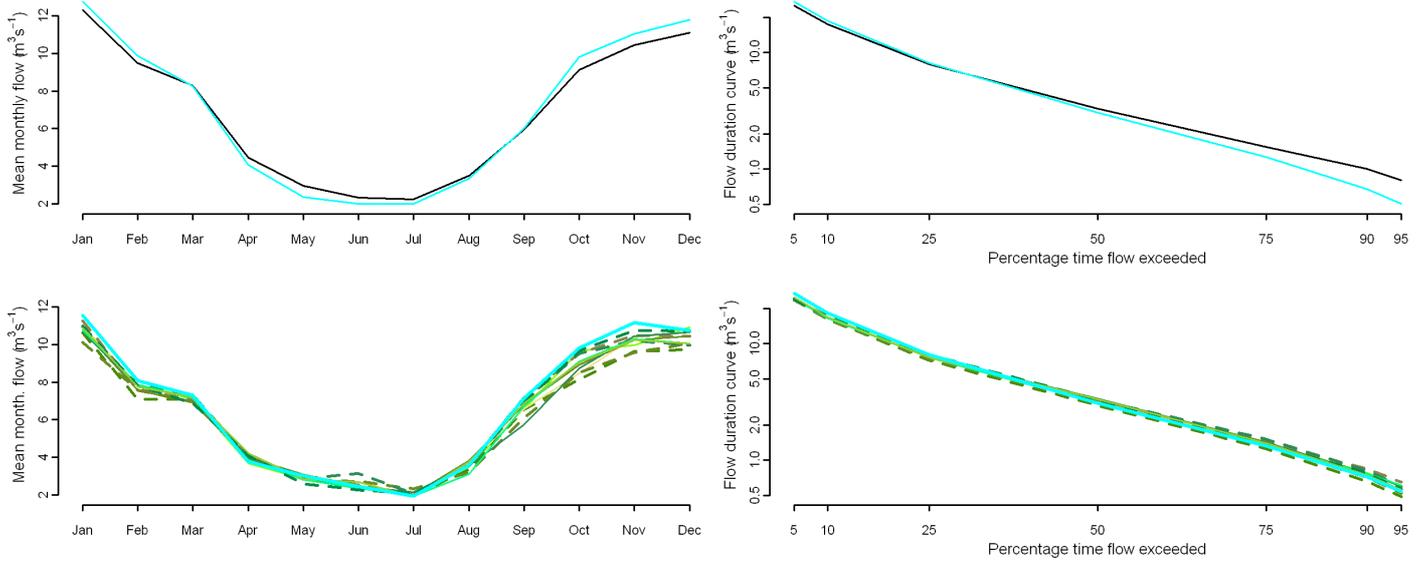


Gauged (black) and simulated (cyan) flows from observed climate - White Cart Water at Hawkhead (84012)



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

Gauged (black), simulated from obs. (cyan) and mod. (green) climate - Top 1971-2005 bottom 1962-1991 - White Cart Water at Hawkhead (84012)



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

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

Climate change graphs for 2050s

Change between future (2040-2069) and control (1961-1990) simulated flow (green) - White Cart Water at Hawkhead (84012)

