

General Information

River Name	Calder	Catchment Area (km2)	45
Station Name	Calder Hall	SAAR (mm) 61-90	1844
Station Number	74006	Mean Annual Rain (mm) 62-91	1839
Grid Reference	NY035045	Mean Annual PE (mm) 62-91	489
EA Region	EA-NW	Observed flow record	1964 to 2005



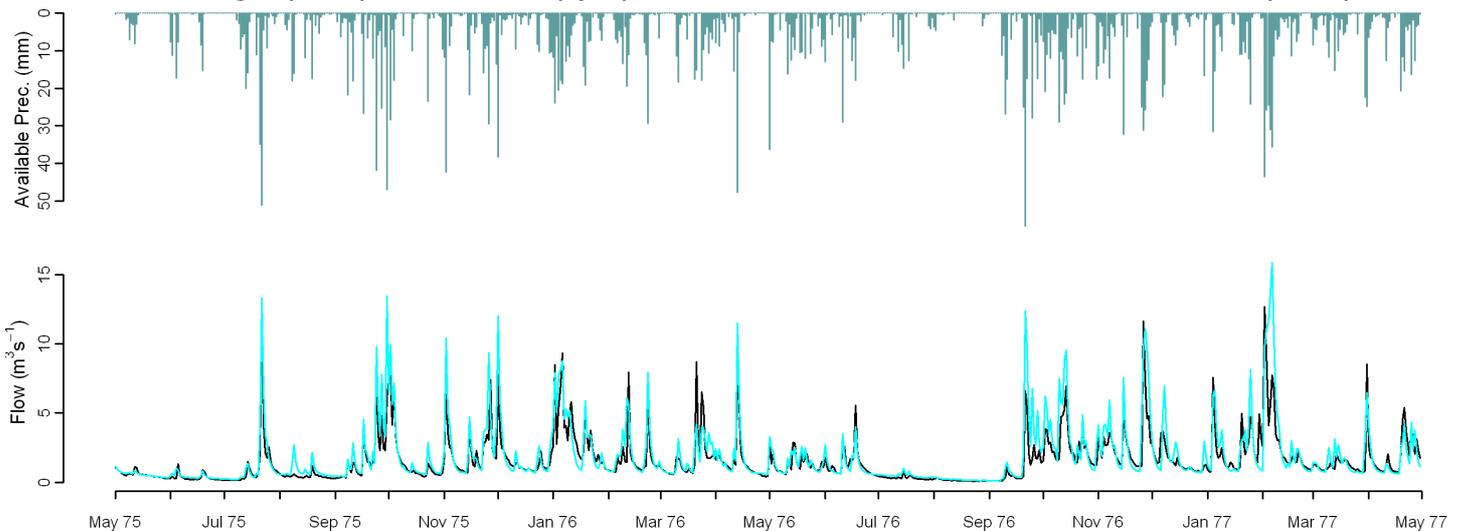
Observed Data

Comparison of gauged and simulated flow

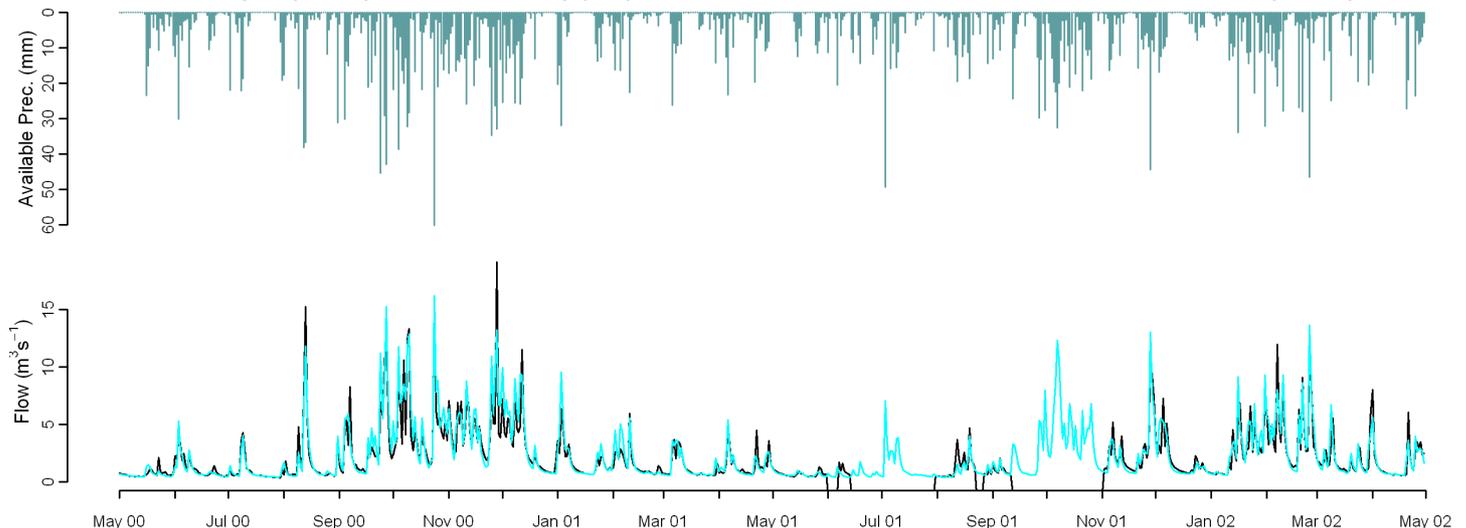
Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	10.5	15.5	13.9	8.6	-0.5	-5.9	-9.9	-7.0	2.0	12.2	18.7	18.1	15.7	0.71
Performance Band	1	2	1	2	1	1	1	1	1	1	2	2	2	2
MORECS (1962-1991)	10.1	18.8	17.1	14.1	-3.1	-2.0	-3.0	-6.1	3.0	11.0	17.4	14.5	17.1	0.51
	Q90	Q75	Q50	Q25	Q5	RP2		RP5		RP10		RP20		
MORECS (1971-2005)	3.6	0.1	-8.6	11.6	16.6									
Performance Band	1	1	2	2	1									
MORECS (1962-1991)	2.4	-6.7	-9.5	13.5	14.3									

Gauged (black) and simulated (cyan) flows from observed climate - Calder at Calder Hall (74006)

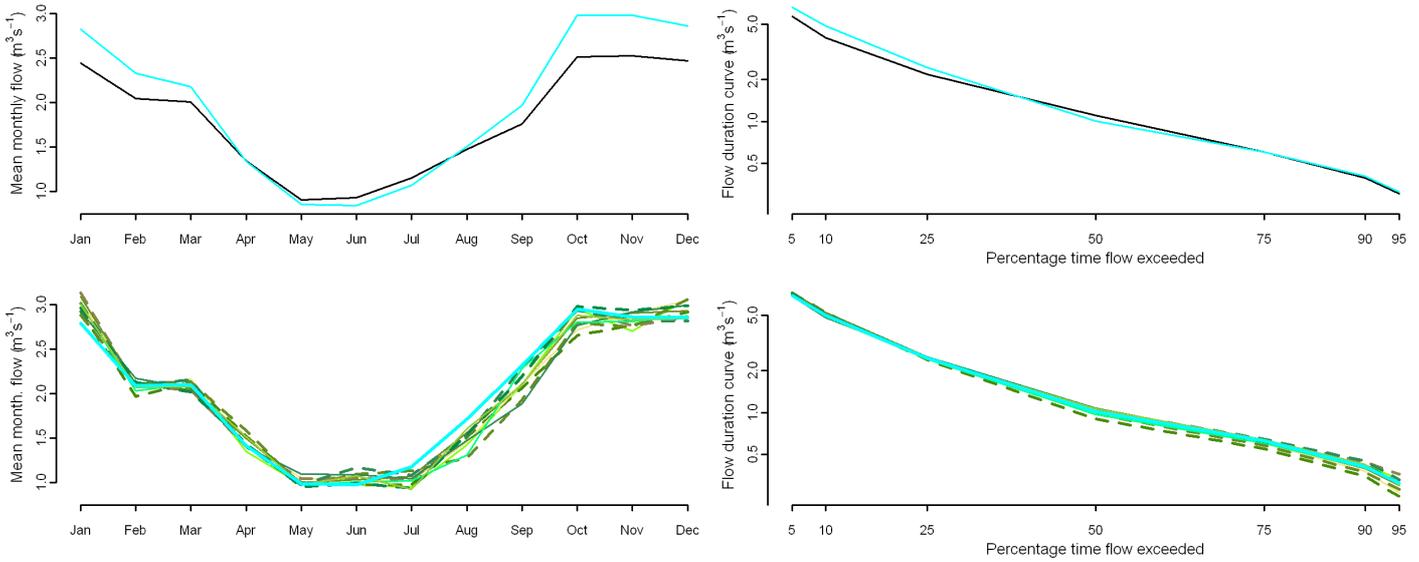


Gauged (black) and simulated (cyan) flows from observed climate - Calder at Calder Hall (74006)



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 - Calder at Calder Hall (74006)



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

Climate change graphs for 2050s

Change between future (2040-2069) and control (1961-1990) simulated flow (green) - Calder at Calder Hall (74006)

