

## General Information

River Name	Whiteadder Water	Catchment Area (km2)	503
Station Name	Hutton Castle	SAAR (mm) 61-90	814
Station Number	21022	Mean Annual Rain (mm) 62-91	832
Grid Reference	NT881550	Mean Annual PE (mm) 62-91	526
EA Region	SEPA-SE	Observed flow record	1969 to 2006



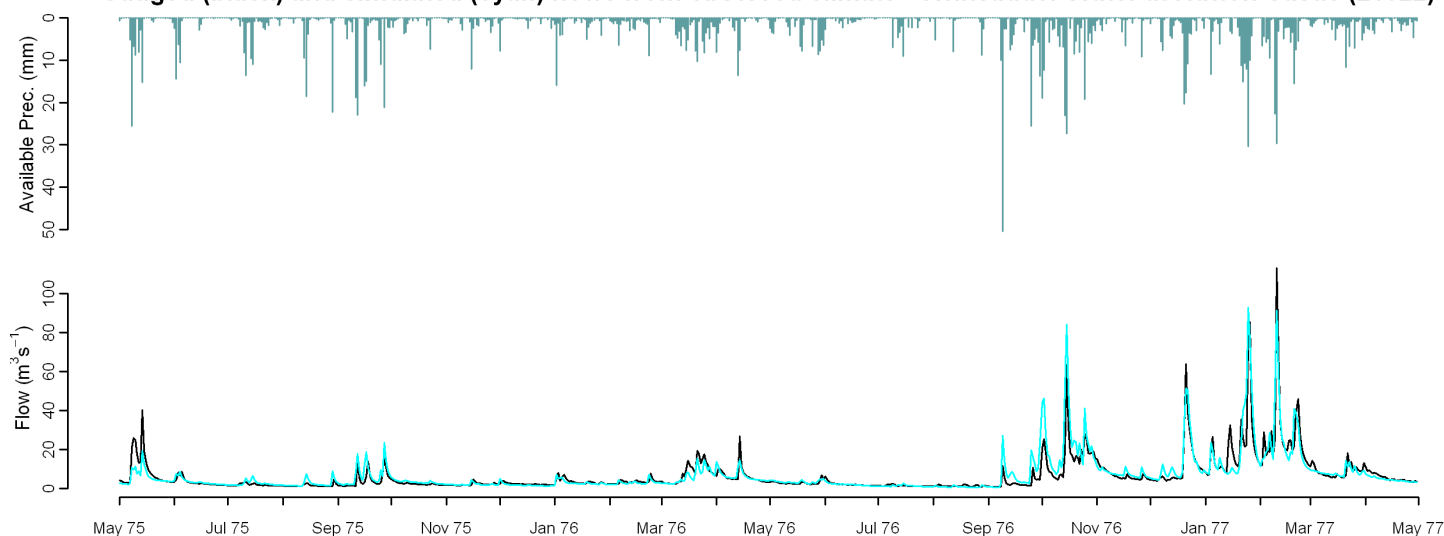
## Observed Data

## Comparison of gauged and simulated flow

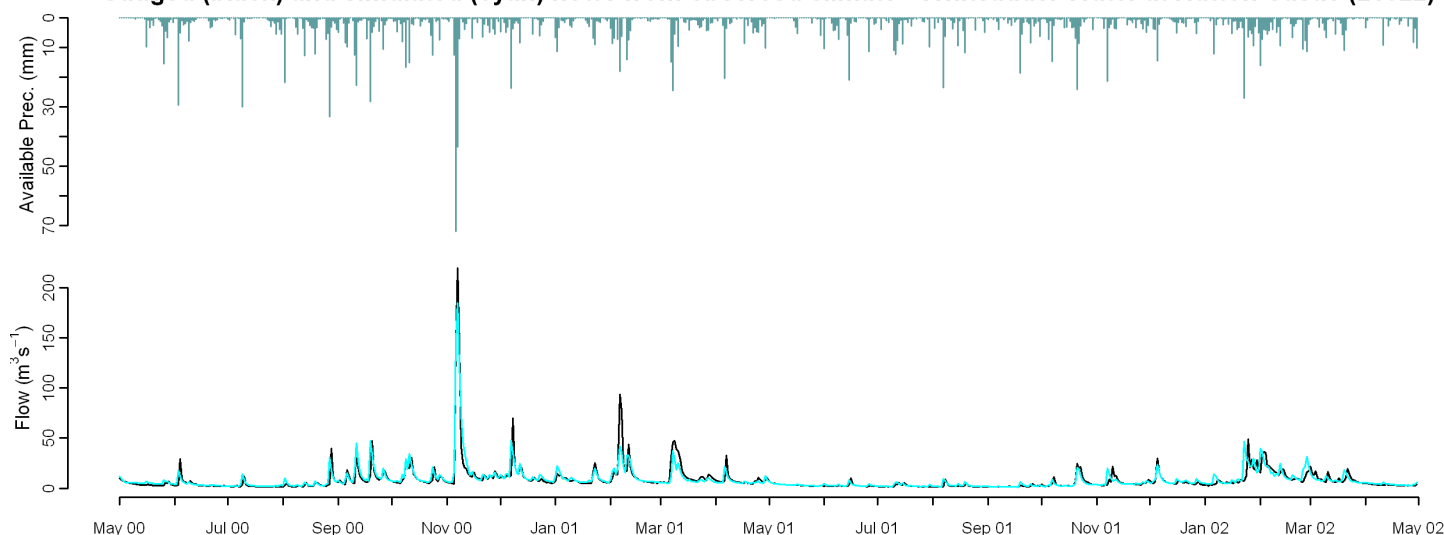
## Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	3.5	1.4	0.4	-6.5	-8.5	-8.9	-3.9	9.7	12.9	23.9	16.7	11.8	8.6	0.73
Performance Band	1	1	1	1	2	1	1	1	1	2	1	1	1	1
MORECS (1962-1991)	1.1	-2.4	-1.2	-6.1	-7.6	-12.8	-3.7	12.1	14.2	26.1	16.6	5.4	3.9	0.76
	Q90	Q75	Q50	Q25	Q5									
MORECS (1971-2005)	0.9	12.0	13.2	1.5	3.9									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	2.6	12.6	13.6	0.2	-0.3									

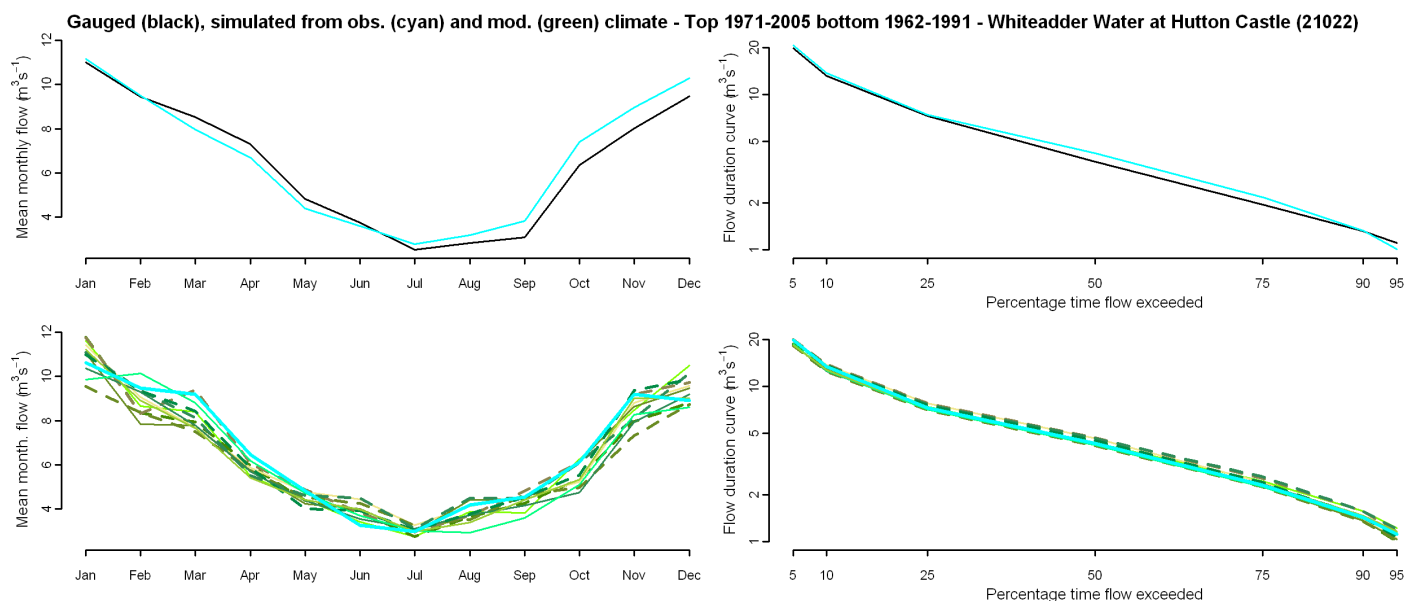
Gauged (black) and simulated (cyan) flows from observed climate - Whiteadder Water at Hutton Castle (21022)



Gauged (black) and simulated (cyan) flows from observed climate - Whiteadder Water at Hutton Castle (21022)



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

## Climate change graphs for 2050s

