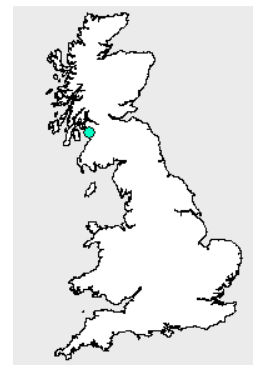


General Information

River Name	Lugton Water	Catchment Area (km2)	55
Station Name	Eglinton Castle	SAAR (mm) 61-90	1345
Station Number	83007	Mean Annual Rain (mm) 62-91	1356
Grid Reference	NS315420	Mean Annual PE (mm) 62-91	529
EA Region	SEPA-SW	Observed flow record	1977 to 2005



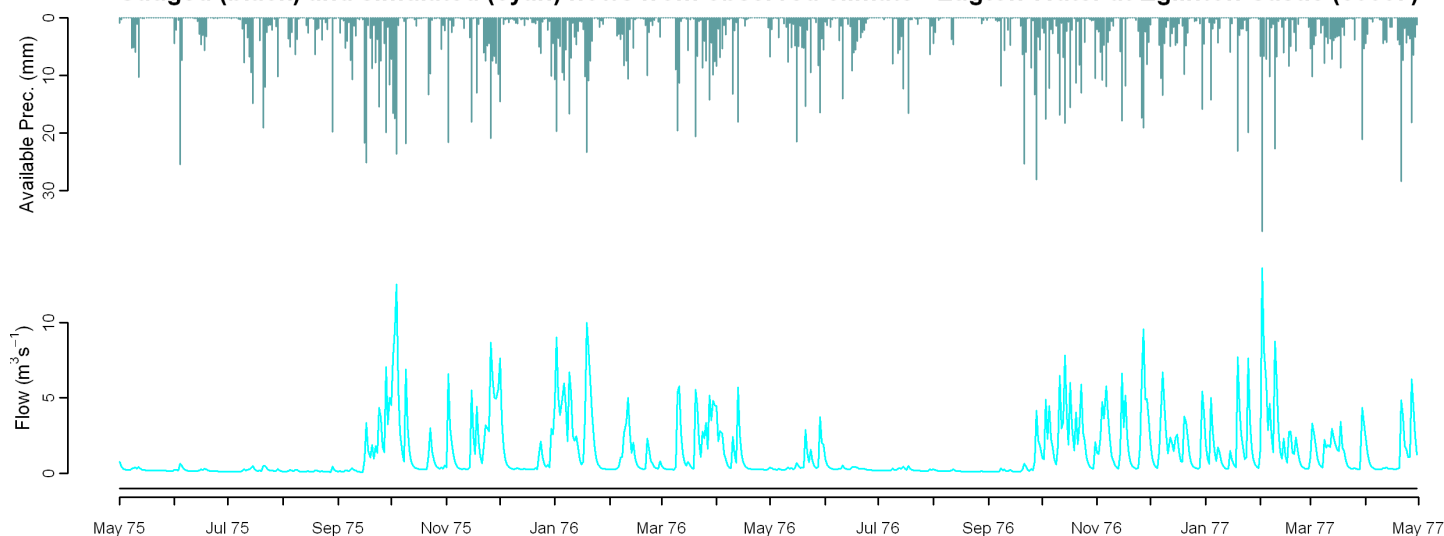
Observed Data

Comparison of gauged and simulated flow

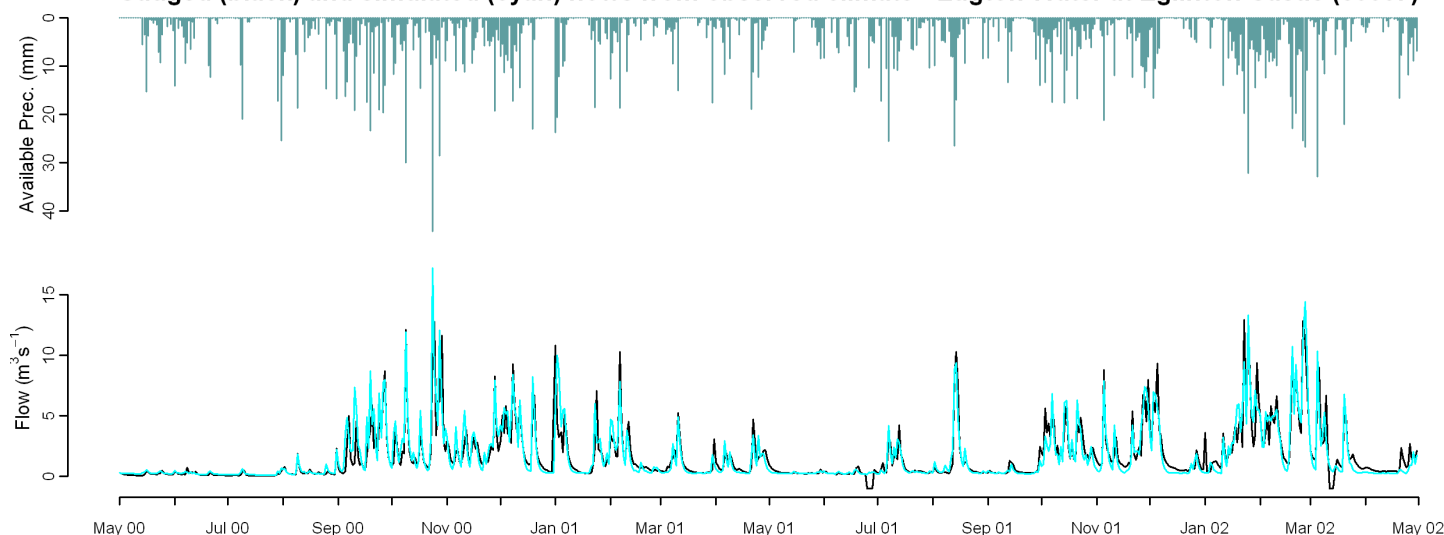
Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	0.8	3.1	0.5	-1.2	-17.0	-15.7	-18.2	-11.8	-4.1	6.3	5.7	5.5	3.0	0.80
Performance Band	1	1	1	1	2	2	3	1	1	1	1	1	1	1
MORECS (1962-1991)	4.1	3.6	3.8	4.2	-14.7	-6.5	-26.5	-11.2	0.7	7.4	10.5	6.6	8.4	0.80
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	26.4	-10.4	-37.0	4.4	2.0									
Performance Band	1	1	1	1	1									
MORECS (1962-1991)	45.3	2.5	-33.2	8.9	5.6									

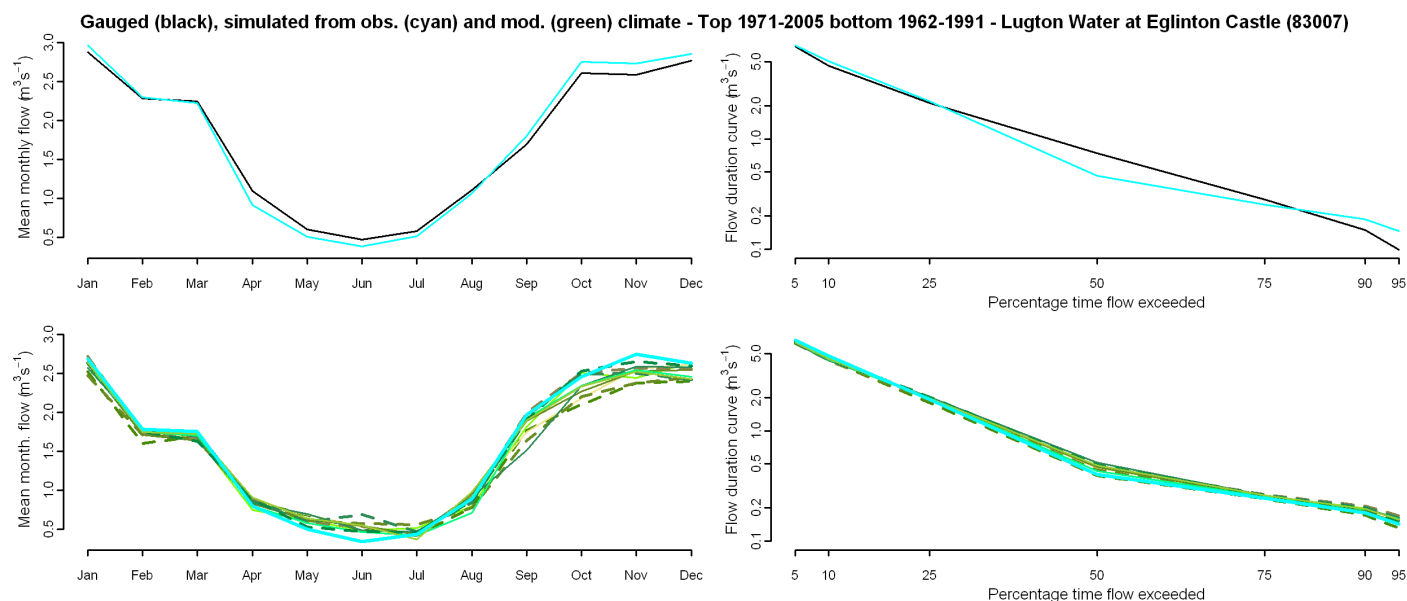
Gauged (black) and simulated (cyan) flows from observed climate - Lugton Water at Eglinton Castle (83007)



Gauged (black) and simulated (cyan) flows from observed climate - Lugton Water at Eglinton Castle (83007)



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

Climate change graphs for 2050s

