

General Information

River Name	Lunan Water	Catchment Area (km ²)	124
Station Name	Kirkton Mill	SAAR (mm) 61-90	771
Station Number	13005	Mean Annual Rain (mm) 62-91	779
Grid Reference	NO655494	Mean Annual PE (mm) 62-91	525
EA Region	SEPA-NE	Observed flow record	1981 to 2005



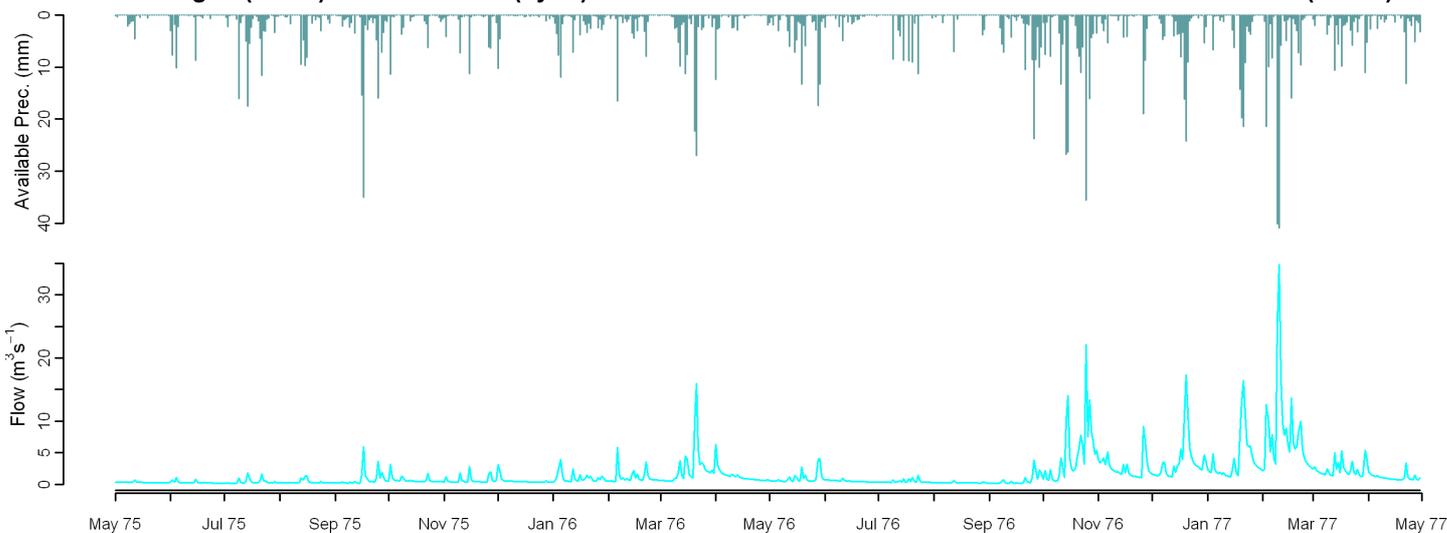
Observed Data

Comparison of gauged and simulated flow

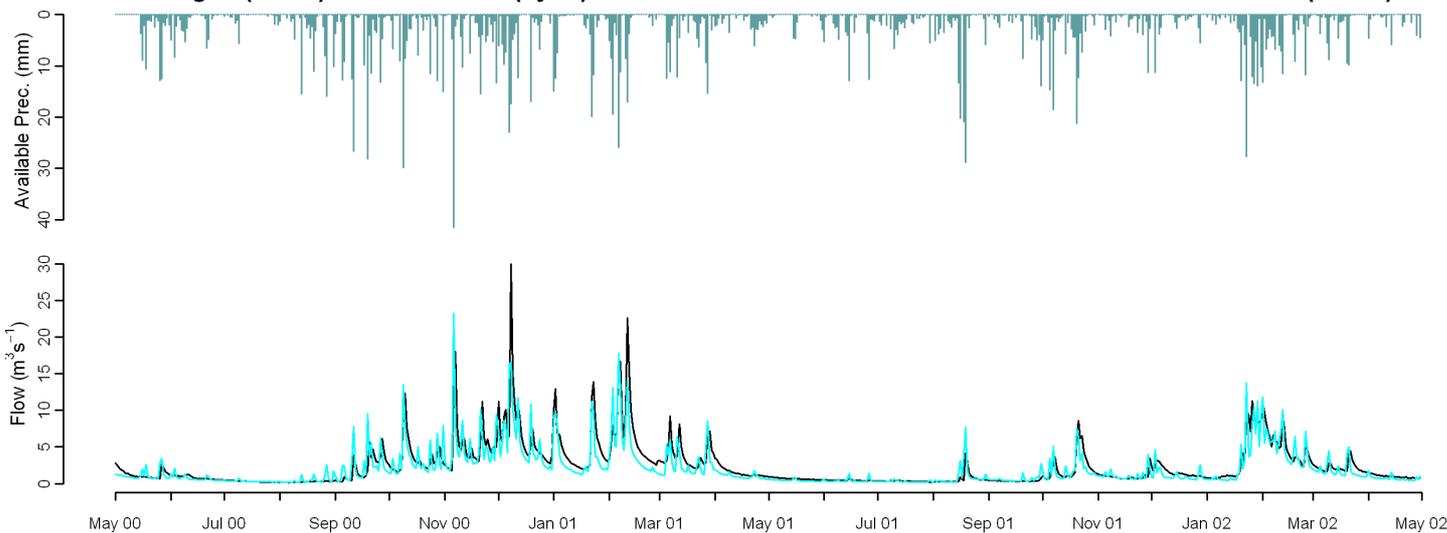
Model used: PDM

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	-8.8	-12.1	-10.9	-13.5	-19.8	-4.2	4.8	22.9	12.7	13.3	-6.3	-7.5	-14.6	0.65
Performance Band	1	2	2	2	2	1	1	2	2	2	1	1	2	1
FAO (1962-1991)	-3.2	-6.3	-7.1	-9.6	-9.5	-3.1	6.9	12.5	5.6	16.7	5.8	2.2	-8.8	0.63
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	10.8	4.0	-9.8	-11.2	-7.6	-10.2	-6.3	-3.4	-0.6					
Performance Band	1	1	1	1	1									
FAO (1962-1991)	12.1	9.9	-4.3	-7.8	0.6	-3.2	4.7	10.0	14.5					

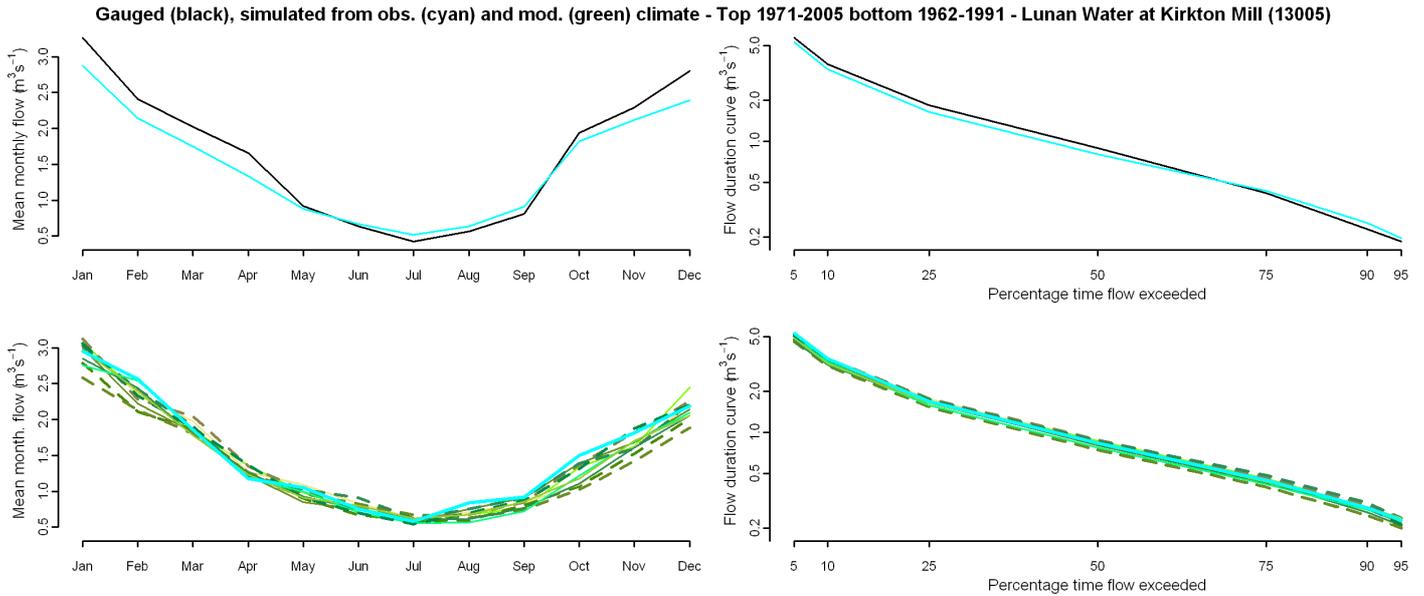
Gauged (black) and simulated (cyan) flows from observed climate - Lunan Water at Kirkton Mill (13005)



Gauged (black) and simulated (cyan) flows from observed climate - Lunan Water at Kirkton Mill (13005)



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	-10	-3	2	-6	-12	-7	-1	-7	-3	-7
January	7	-6	7	9	5	-6	-2	5	-6	7	2
April	14	5	6	17	2	7	5	2	3	15	3
July	8	4	9	8	-3	-3	4	4	-5	-9	3
October	-9	-29	-27	-5	-11	-29	-23	-15	-20	-13	-7
Q90	2	-8	-6	8	-6	-13	-8	5	-3	-3	-1
Q75	4	-9	-1	7	-6	-12	-4	7	-7	-5	-4
Q50	4	-10	0	8	-6	-11	-1	3	-8	-3	0
Q25	2	-8	4	7	-2	-8	-2	3	-6	2	-4
Q5	-2	-10	-5	0	-6	-13	-11	-5	-5	-4	-12
RP2	-13	-13	-13	-10	-9	-17	-15	-10	-13	-9	-8
RP10	-17	-18	-6	-10	0	-18	-12	-18	-6	-16	-6

Climate change graphs for 2050s

