Catchment Fact Sheet 21006 Future Flows and Groundwater Levels

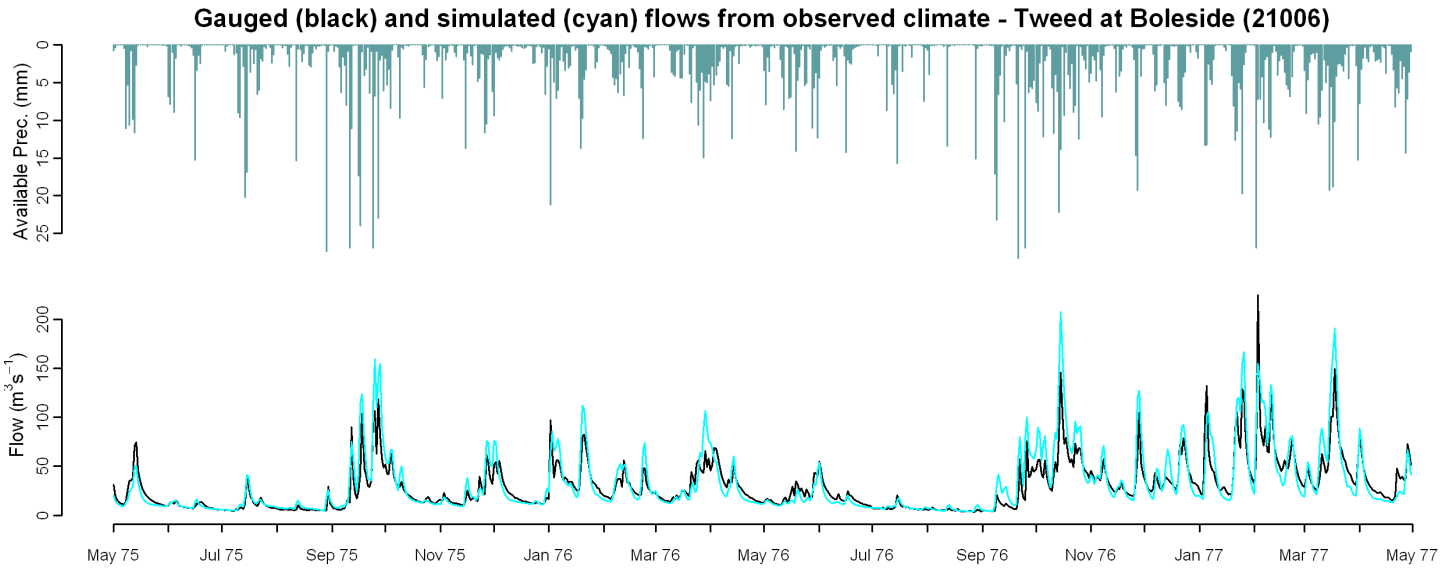
General Information

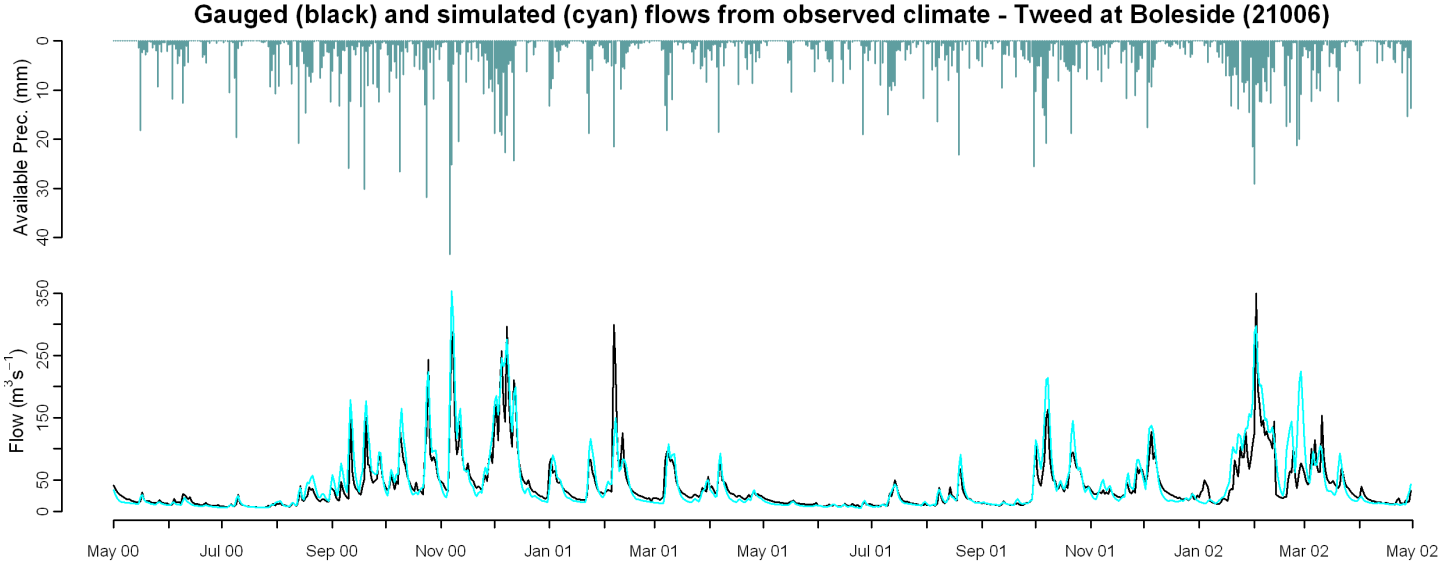
River Name	Tweed	Catchment Area (km2)	1500
Station Name	Boleside	SAAR (mm) 61-90	1164
Station Number	21006	Mean Annual Rain (mm) 62-91	1185
Grid Reference	NT498334	Mean Annual PE (mm) 62-91	455
EA Region	SEPA-SE	Observed flow record	1961 to 2006

Observed Data Comparison of gauged and simulated flow Model used: CERF

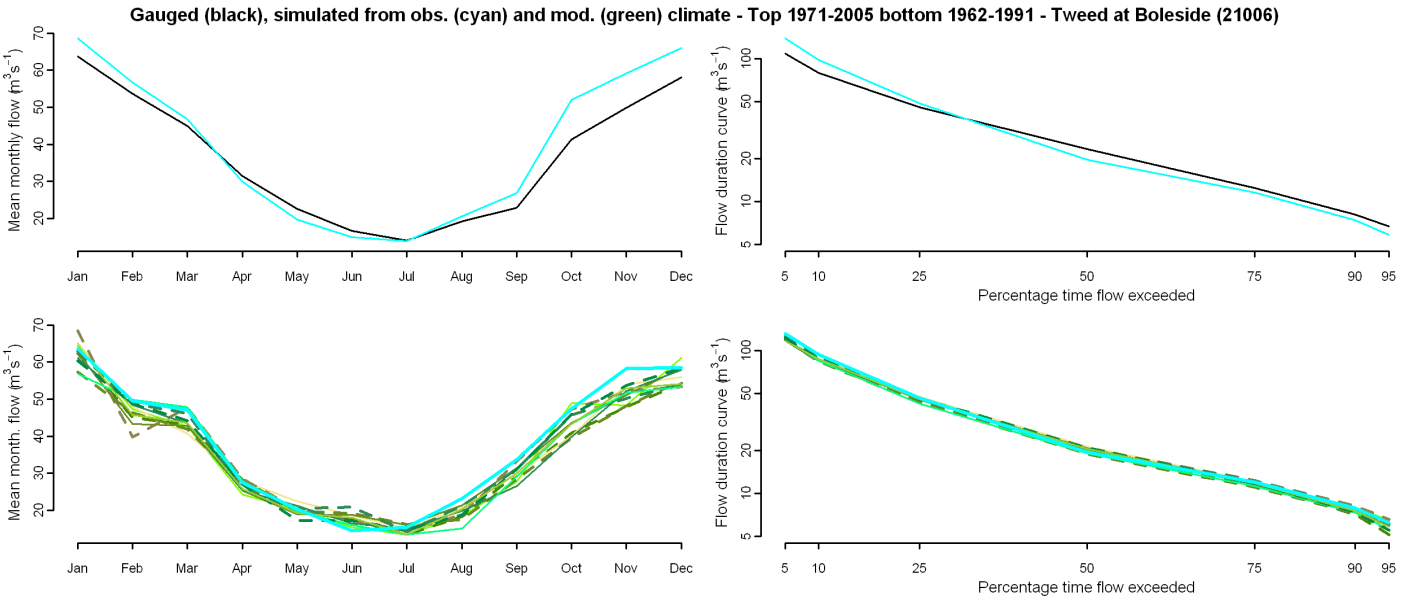
	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	8.0	7.8	5.7	4.1	-5.0	-13.2	-10.6	-0.6	7.3	17.2	25.7	18.5	13.4	0.75
Performance Band	1	1	1	1	1	2	1	1	1	2	2	2	2	1
MORECS (1962-1991)	7.0	9.7	3.3	3.6	-8.3	-13.5	-9.3	1.6	8.9	17.5	18.6	16.0	10.4	0.75

	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20
MORECS (1971-2005)	-8.7	-7.1	-15.5	6.6	27.4				
Performance Band	1	1	2	2	2				
MORECS (1962-1991)	-5.4	-7.3	-16.8	5.3	24.9				





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

Climate change graphs for 2050s