Catchment Fact Sheet 84004 Future Flows and Groundwater Levels

General Information

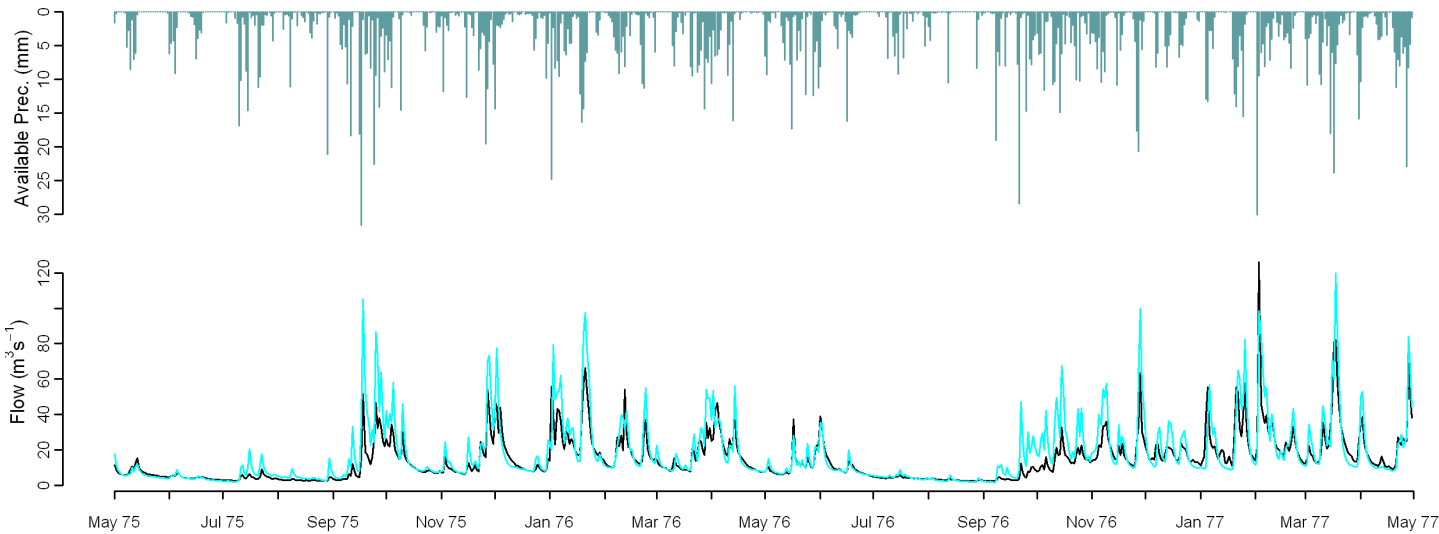| River Name	Clyde	Catchment Area (km2)	742
Station Name	Sills of Clyde	SAAR (mm) 61-90	1222
Station Number	84004	Mean Annual Rain (mm) 62-91	1238
Grid Reference	NS927424	Mean Annual PE (mm) 62-91	456
EA Region	SEPA-SW	Observed flow record	1961 to 2005

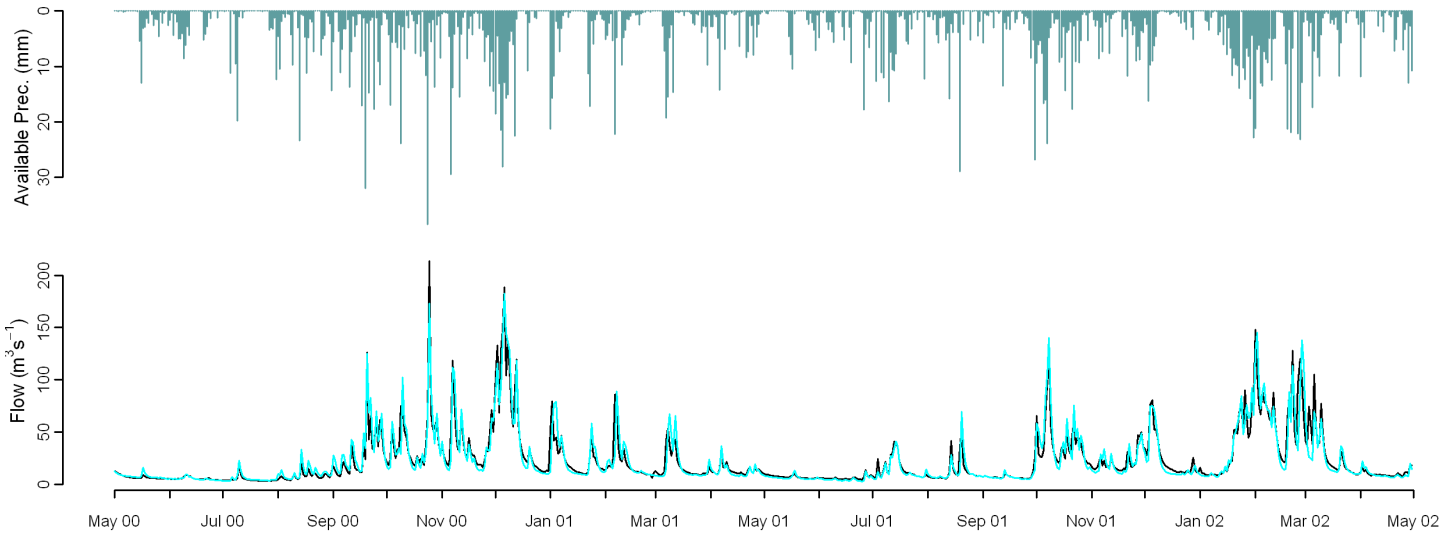## Observed Data — Comparison of gauged and simulated flow — Model used: CERF

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	8.2	5.1	5.7	4.7	-0.1	-6.2	-1.9	10.9	16.2	24.4	20.7	11.7	7.7	0.75
Performance Band	1	1	1	1	1	1	1	2	2	2	2	2	1	1
MORECS (1962-1991)	11.6	10.8	8.2	7.3	0.6	-5.4	-2.1	15.4	21.0	28.1	19.2	17.5	11.4	0.68

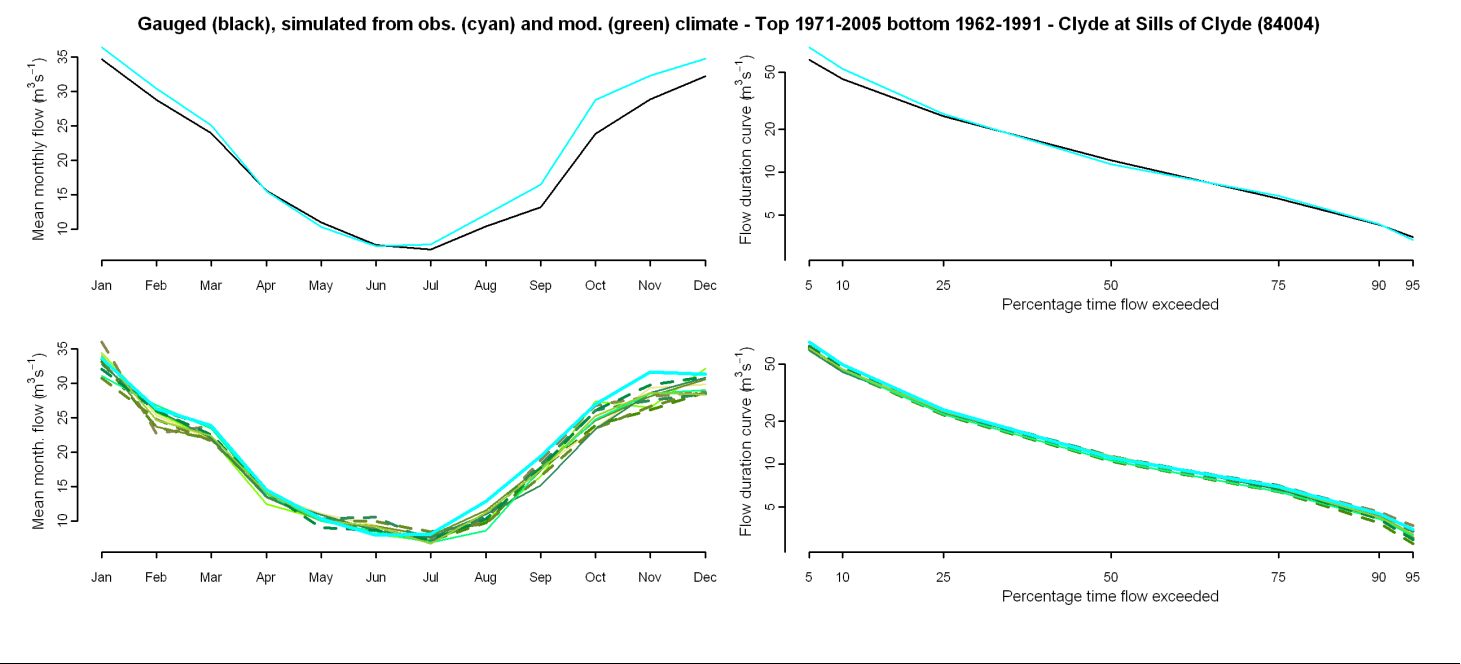|	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20
MORECS (1971-2005)	1.0	5.1	-6.3	3.9	21.6				
Performance Band	1	1	2	2	2				
MORECS (1962-1991)	4.1	5.7	-5.1	6.8	26.5				

Gauged (black) and simulated (cyan) flows from observed climate - Clyde at Sills of Clyde (84004)

Gauged (black) and simulated (cyan) flows from observed climate - Clyde at Sills of Clyde (84004)

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 - Clyde at Sills of Clyde (84004)

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

Climate change graphs for 2050s

Change between future (2040-2069) and control (1961-1990) simulated flow (green) - Clyde at Sills of Clyde (84004)