

## General Information

River Name	Waveney	Catchment Area (km2)	370
Station Name	Needham Mill	SAAR (mm) 61-90	594
Station Number	34006	Mean Annual Rain (mm) 62-91	594
Grid Reference	TM229811	Mean Annual PE (mm) 62-91	602
EA Region	EA-A	Observed flow record	1963 to 2005



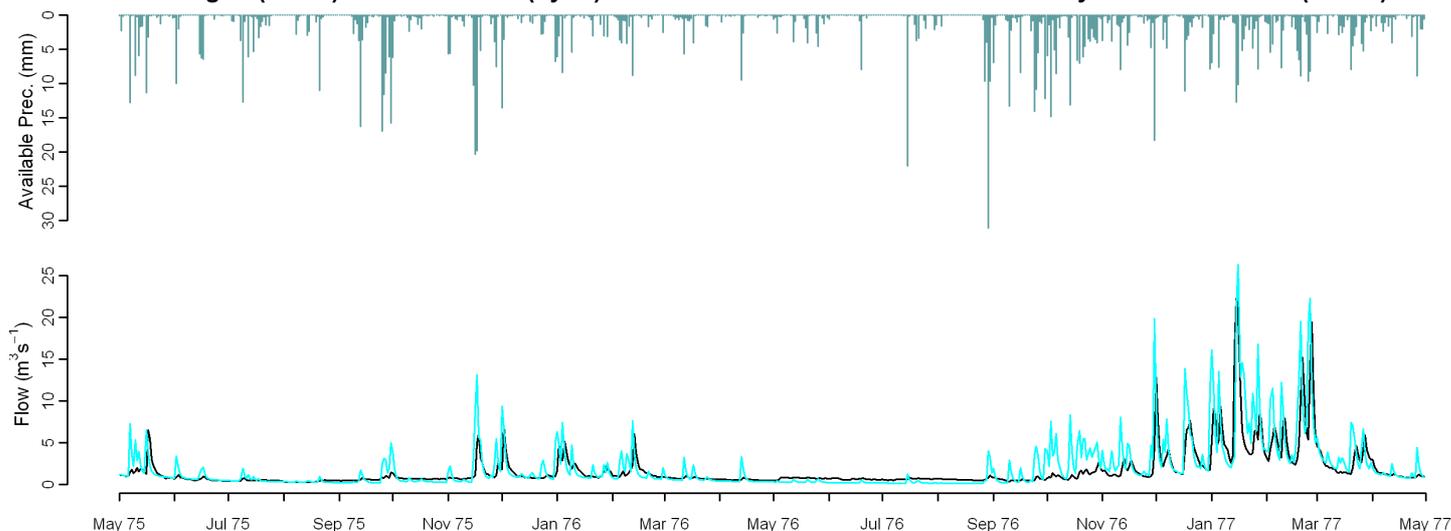
## Observed Data

## Comparison of gauged and simulated flow

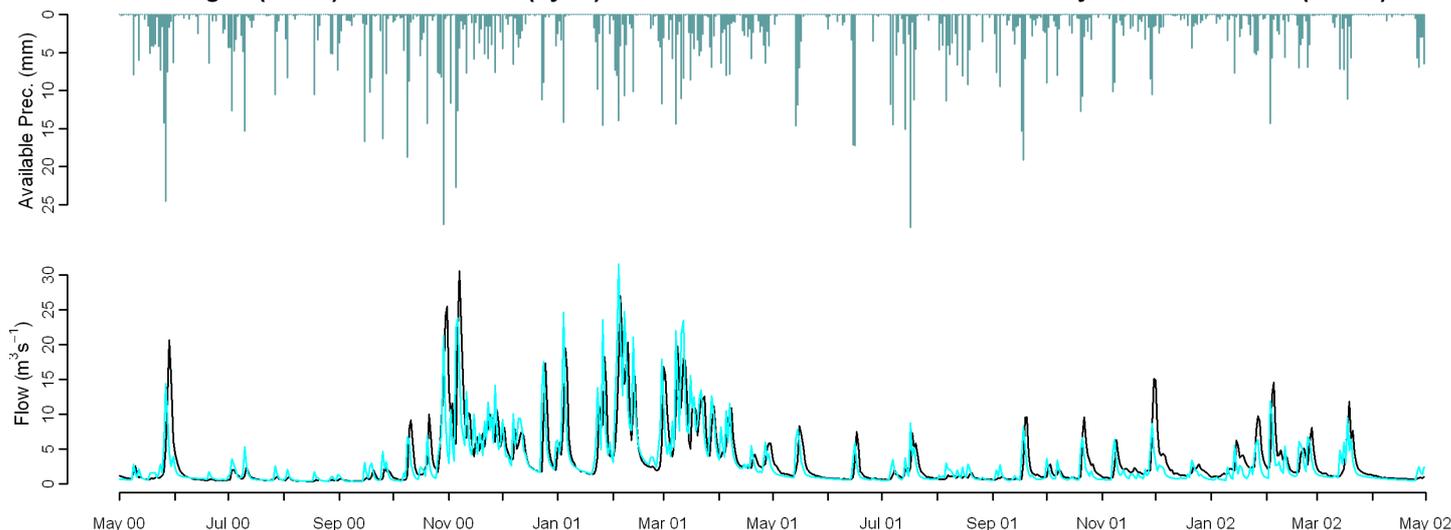
## Model used: PDM

	Mean Annual	J	F	M	A	M	J	J	A	S	O	N	D	Nash Sutcliffe
MORECS (1971-2005)	3.4	-7.3	12.6	-2.4	-3.0	8.8	22.0	27.4	8.0	40.1	9.4	6.9	0.8	0.43
Performance Band	1	1	2	1	1	1	2	2	1	3	1	1	1	2
FAO (1962-1991)	10.5	1.0	10.7	3.4	3.6	19.4	34.6	33.7	1.0	9.9	22.1	28.0	8.7	0.41
	Q90	Q75	Q50	Q25	Q5	RP2	RP5	RP10	RP20					
MORECS (1971-2005)	-23.4	-7.4	11.5	15.6	4.0	1.1	-7.5	-19.2	-30.8					
Performance Band	2	1	1	1	1									
FAO (1962-1991)	-24.8	-6.4	20.5	25.4	12.5	3.6	-9.3	-20.9	-31.9					

Gauged (black) and simulated (cyan) flows from observed climate - Waveney at Needham Mill (34006)

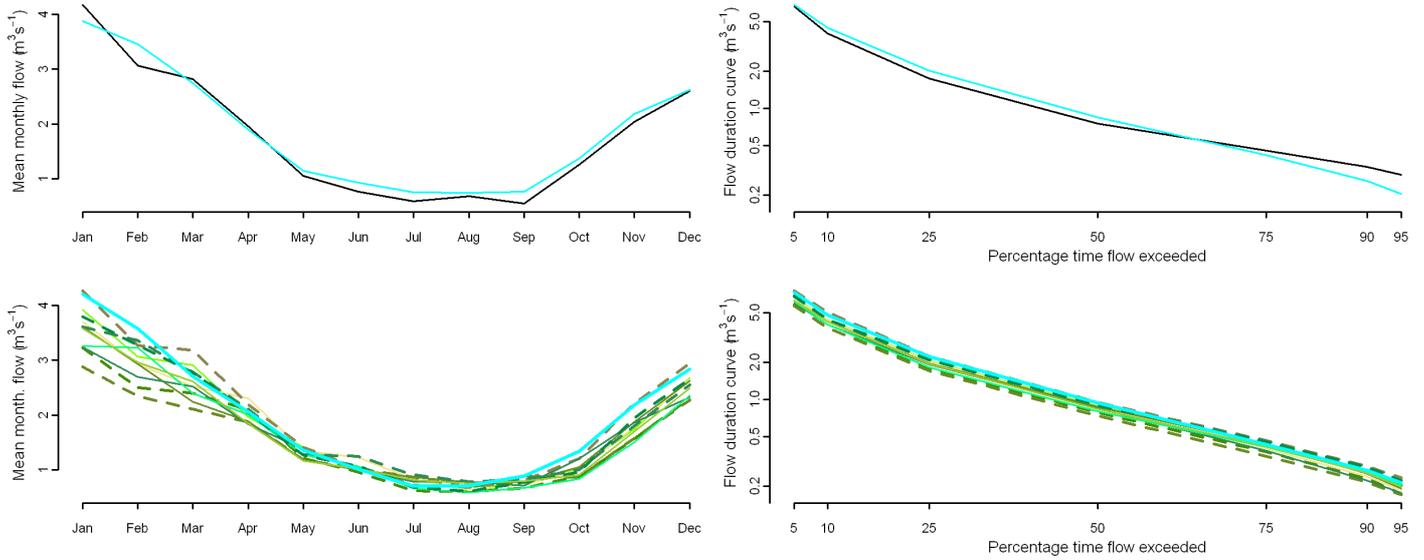


Gauged (black) and simulated (cyan) flows from observed climate - Waveney at Needham Mill (34006)



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 - Waveney at Needham Mill (34006)



Percentage difference between flow simulated from observed climate and Future Flows Climate

	afgcx	afixa	afixc	afixh	afixi	afixj	afixk	afixl	afixm	afixo	afixq
Annual	-7	-21	-8	3	-13	-22	-14	-5	-15	-8	-14
January	-7	-27	-9	5	-12	-29	-25	-10	-19	-9	-14
April	-5	-8	12	5	-10	-12	-12	2	-2	0	-10
July	1	-10	13	2	14	20	11	25	-5	-5	11
October	-21	-33	-25	-6	-28	-35	-9	-29	-34	-29	-14
Q90	0	-14	-12	7	-9	-21	-17	-4	-6	5	-7
Q75	1	-13	-9	7	-3	-22	-12	4	-6	4	-6
Q50	-6	-17	-8	3	-10	-22	-11	-2	-14	-4	-13
Q25	-7	-20	-8	3	-13	-22	-14	-3	-17	-6	-14
Q5	-8	-24	-9	4	-14	-23	-18	-6	-14	-7	-15
RP2	-20	-28	-16	-5	-21	-24	-26	-5	-19	-10	-16
RP10	-10	-20	-3	-6	-15	-14	-18	-2	-25	-11	-22

Climate change graphs for 2050s

Change between future (2040-2069) and control (1961-1990) simulated flow (green) - Waveney at Needham Mill (34006)

