

General Information

| | | | |
|----------------|------------------|-----------------------------------|--------------|
| River Name | Belchamp Brook | Catchment Area (km ²) | 59 |
| Station Name | Bardfield Bridge | SAAR (mm) 61-90 | 560 |
| Station Number | 36007 | Mean Annual Rain (mm) 62-91 | 561 |
| Grid Reference | TL848421 | Mean Annual PE (mm) 62-91 | 599 |
| EA Region | EA-A | Observed flow record | 1962 to 2005 |



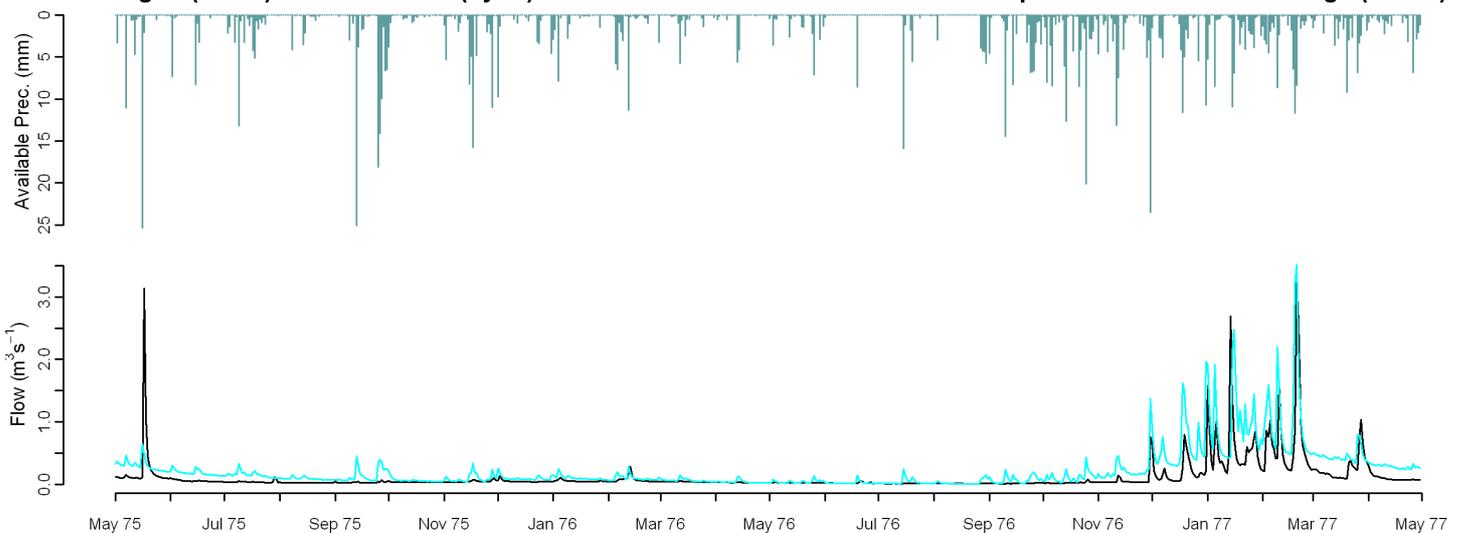
Observed Data

Comparison of gauged and simulated flow

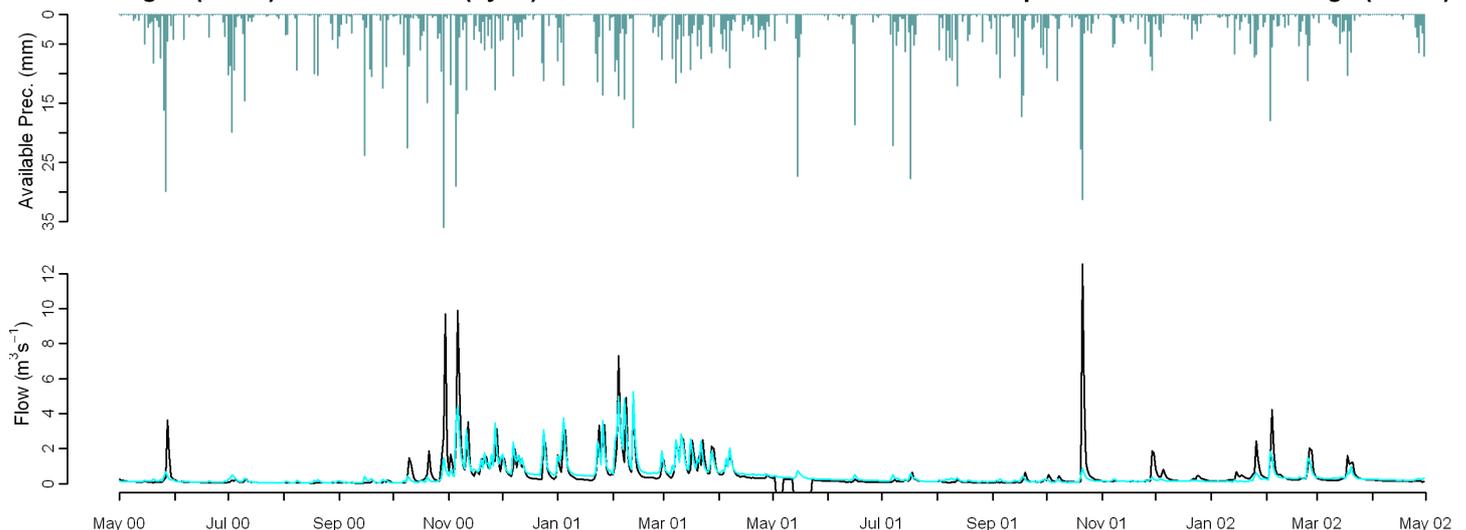
Model used: CERF

| | Mean Annual | J | F | M | A | M | J | J | A | S | O | N | D | Nash Sutcliffe |
|--------------------|-------------|-------|-------|------|-------|------|------|-------|------|------|-------|-------|-------|----------------|
| MORECS (1971-2005) | 15.2 | -9.8 | 17.6 | 10.4 | 21.5 | 57.7 | 94.2 | 112.0 | 98.2 | 90.8 | -21.1 | -12.0 | -4.5 | 0.53 |
| Performance Band | 1 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| MORECS (1962-1991) | 16.1 | -13.9 | 17.2 | 10.2 | 26.8 | 64.9 | 98.7 | 160 | 115 | 75.1 | 7.2 | 2.9 | -11.3 | 0.53 |
| | Q90 | Q75 | Q50 | Q25 | Q5 | RP2 | RP5 | RP10 | RP20 | | | | | |
| MORECS (1971-2005) | 46.1 | 86.1 | 105.0 | 54.0 | -14.0 | | | | | | | | | |
| Performance Band | 2 | 1 | 1 | 2 | 2 | | | | | | | | | |
| MORECS (1962-1991) | 58.8 | 91.0 | 121.5 | 61.3 | -16.3 | | | | | | | | | |

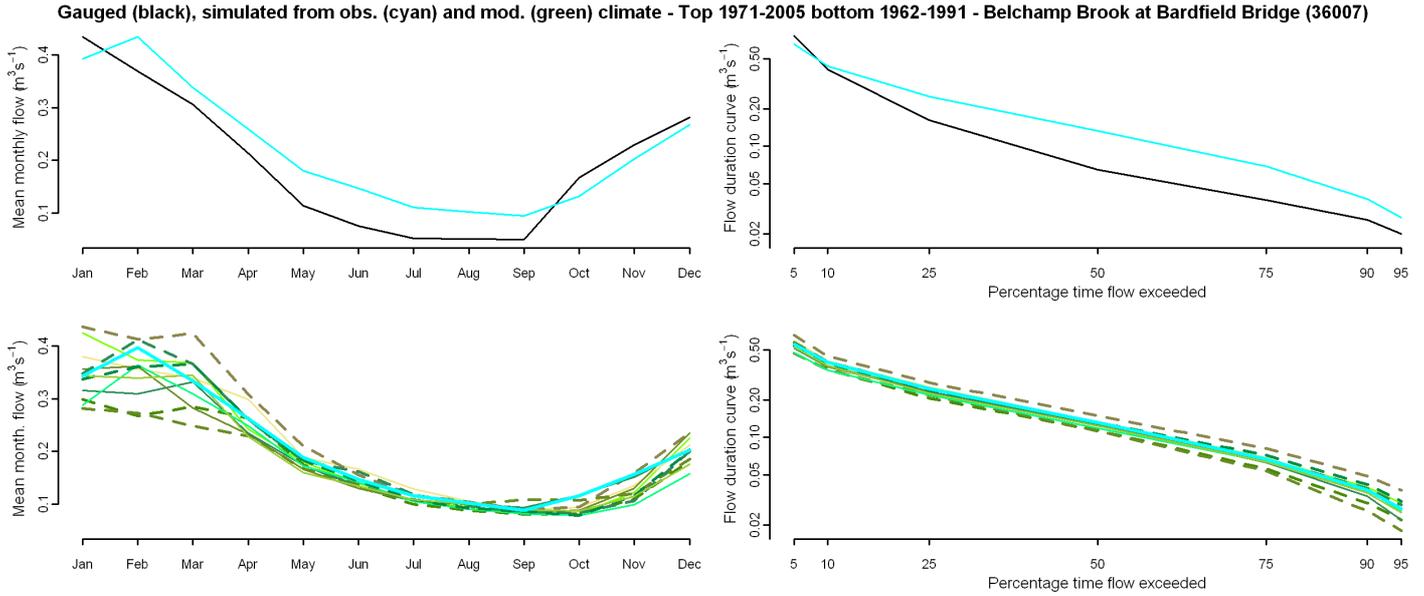
Gauged (black) and simulated (cyan) flows from observed climate - Belchamp Brook at Bardfield Bridge (36007)



Gauged (black) and simulated (cyan) flows from observed climate - Belchamp Brook at Bardfield Bridge (36007)



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 | 3 | -17 | 5 | 16 | -6 | -15 | -6 | 0 | -13 | -2 | -9 |
| January | 23 | -20 | 13 | 28 | 6 | -18 | -12 | 4 | -15 | 3 | -1 |
| April | -6 | -9 | 19 | 26 | -9 | -14 | -9 | 4 | -4 | 2 | -10 |
| July | -7 | -14 | 16 | 7 | -10 | -9 | -6 | 5 | -6 | -5 | -6 |
| October | -26 | -27 | -17 | -14 | -29 | -6 | 4 | -27 | -28 | -30 | -26 |
| Q90 | 5 | -23 | -1 | 34 | -3 | -32 | -11 | 3 | -1 | 9 | -6 |
| Q75 | 3 | -18 | 5 | 25 | -5 | -21 | -5 | 3 | -5 | 7 | -6 |
| Q50 | -2 | -16 | 4 | 16 | -4 | -16 | -5 | 2 | -8 | 1 | -7 |
| Q25 | -6 | -21 | 5 | 14 | -6 | -14 | -7 | 2 | -11 | -2 | -11 |
| Q5 | 6 | -20 | 9 | 22 | -7 | -18 | -9 | 6 | -14 | 1 | -10 |
| RP2 | 16 | -25 | 0 | 4 | -19 | -8 | -3 | 2 | -14 | -13 | -18 |
| RP10 | 7 | -12 | 9 | 6 | -22 | -14 | -15 | 0 | -14 | -13 | -20 |

Climate change graphs for 2050s

