

General Information

| | | | |
|----------------|---------------|-----------------------------------|--------------|
| River Name | Liddel Water | Catchment Area (km ²) | 319 |
| Station Name | Rowanburnfoot | SAAR (mm) 61-90 | 1293 |
| Station Number | 77003 | Mean Annual Rain (mm) 62-91 | 1311 |
| Grid Reference | NY415759 | Mean Annual PE (mm) 62-91 | 487 |
| EA Region | SEPA-SW | Observed flow record | 1973 to 2005 |



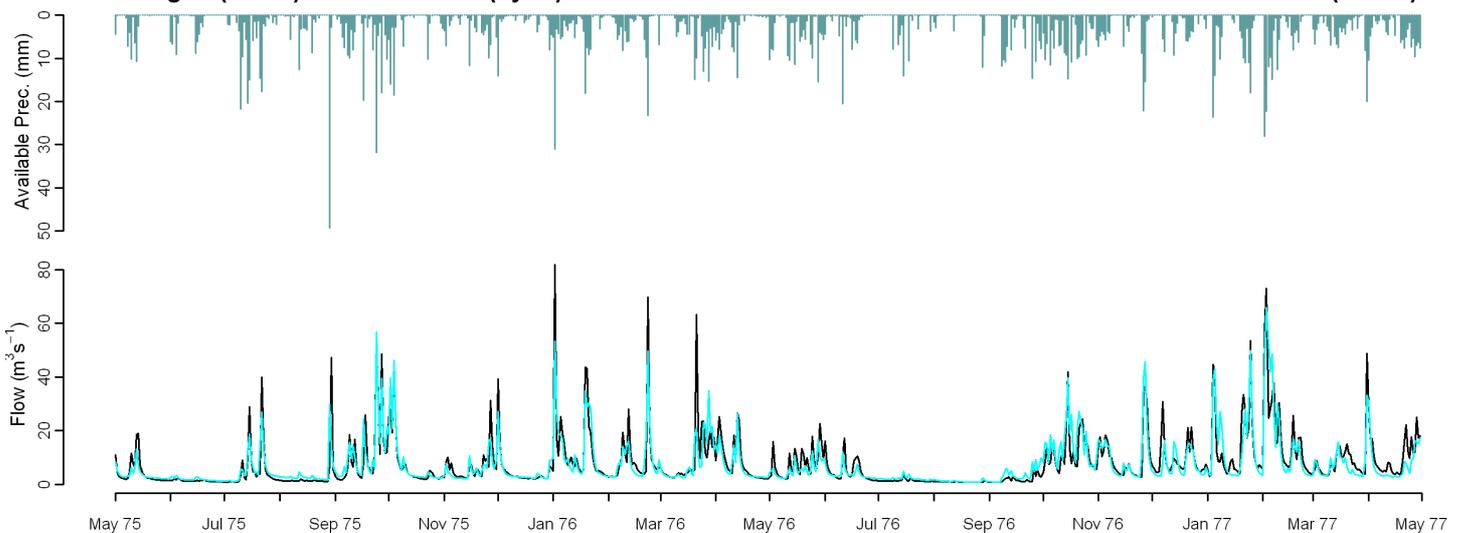
Observed Data

Comparison of gauged and simulated flow

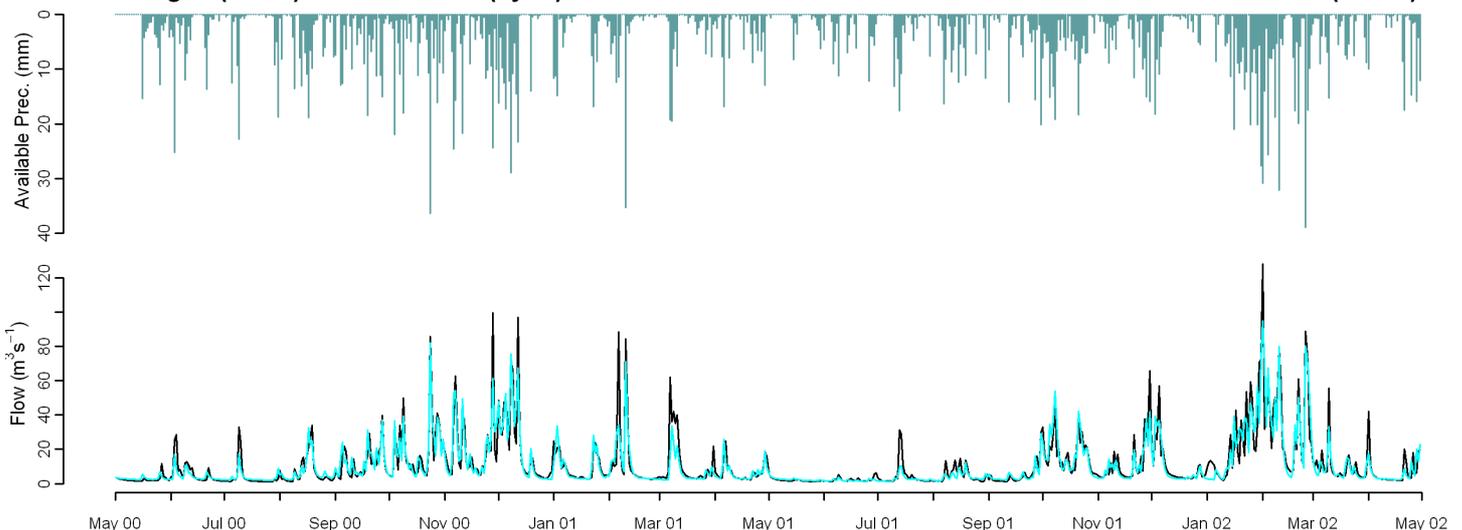
Model used: CERF

| | Mean Annual | J | F | M | A | M | J | J | A | S | O | N | D | Nash Sutcliffe |
|--------------------|-------------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|----------------|
| MORECS (1971-2005) | -5.2 | -5.0 | -6.7 | -10.2 | -14.0 | -16.8 | -11.9 | -4.2 | -1.9 | 1.7 | 0.2 | -2.5 | -2.3 | 0.78 |
| Performance Band | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MORECS (1962-1991) | -6.1 | -7.4 | -7.3 | -8.3 | -17.0 | -21.7 | -14.4 | -3.2 | -0.3 | -0.1 | -3.2 | -2.0 | -3.8 | 0.78 |
| | Q90 | Q75 | Q50 | Q25 | Q5 | RP2 | | RP5 | | RP10 | | RP20 | | |
| MORECS (1971-2005) | 32.3 | 10.7 | -19.5 | -5.8 | -1.8 | | | | | | | | | |
| Performance Band | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| MORECS (1962-1991) | 30.7 | 9.0 | -23.2 | -8.9 | -3.6 | | | | | | | | | |

Gauged (black) and simulated (cyan) flows from observed climate - Liddel Water at Rowanburnfoot (77003)

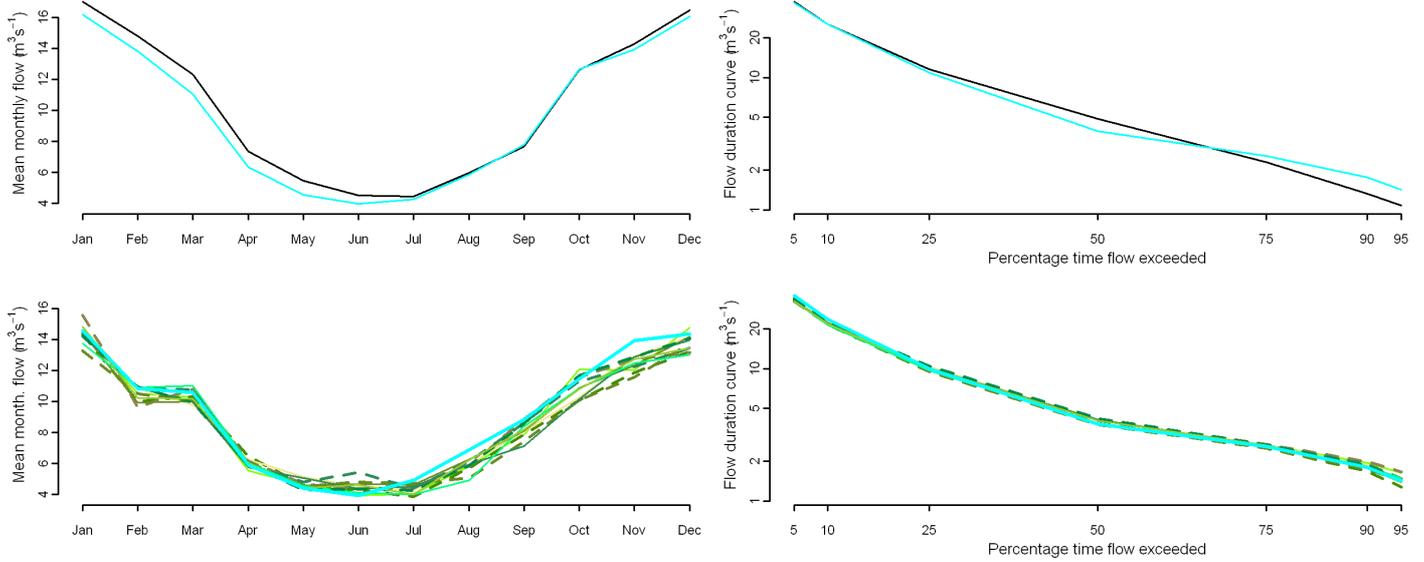


Gauged (black) and simulated (cyan) flows from observed climate - Liddel Water at Rowanburnfoot (77003)



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 - Liddel Water at Rowanburnfoot (77003)



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

| | afgcx | afixa | afixc | afixh | afixi | afixj | afixk | afixl | afixm | afixo | afixq |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Annual | -2 | -5 | -2 | 1 | -3 | -5 | -5 | 1 | -4 | -2 | -4 |
| January | 0 | -3 | 1 | 4 | -1 | -4 | -5 | 0 | -6 | -5 | 6 |
| April | -5 | 0 | 8 | 12 | 0 | 3 | -1 | 5 | -2 | 5 | 1 |
| July | -15 | -12 | -14 | -7 | -6 | -10 | -9 | -9 | -17 | -15 | -17 |
| October | 6 | -6 | -14 | 3 | -4 | -10 | 1 | -4 | -4 | 4 | -6 |
| Q90 | 9 | -5 | 2 | 11 | -3 | -3 | -2 | 5 | 1 | -1 | -1 |
| Q75 | 5 | -2 | 3 | 6 | 1 | -3 | 0 | 4 | -1 | 1 | 2 |
| Q50 | 8 | 0 | 8 | 10 | 5 | -1 | 8 | 7 | 1 | 9 | 6 |
| Q25 | 2 | -4 | 3 | 4 | -1 | -3 | 1 | 3 | -4 | 4 | 1 |
| Q5 | -8 | -9 | -9 | -5 | -10 | -8 | -8 | -3 | -9 | -7 | -10 |
| RP2 | -10 | -4 | -8 | -4 | -4 | -7 | -12 | -8 | 0 | -2 | -5 |
| RP10 | -9 | -9 | -2 | 0 | 1 | -4 | -15 | -2 | -4 | 6 | 4 |

Climate change graphs for 2050s

Change between future (2040-2069) and control (1961-1990) simulated flow (green) - Liddel Water at Rowanburnfoot (77003)

