

Table 6 (new). Uncertainty analyses for variations sub-catchment width and Manning's n (impervious surface and natural channels) for WS4. In each test run, only one parameter was changed and others were held constant.

| | Current condition value | Run 1 | Run 2 | Run 3 | Run 4 | Run 5 | Run 6 |
|--|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Parameters and Statistics | | | | | | | |
| Number of sub-catchments | 52 | | | | | | |
| Average width of sub-catchments (m) | 101 | 90.9 | 111.1 | | | | |
| Manning's n (pervious surfaces) | 0.4 | | | 0.2 | 0.5 | | |
| Manning's n (channels: natural) | 0.05 | | | | | 0.04 | 0.055 |
| Model performance statistics | | | | | | | |
| R ² | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.90 |
| NSE | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.86 |
| Unit-area peak discharge (x 10 ⁻⁶ m s ⁻¹) | 1.01 | 1.01 | 1.02 | 1.01 | 1.01 | 1.00 | 0.99 |
| Change in unit-area peak discharge (%) | | -0.15 | 0.25 | 0 | 0 | -1.22 | -2.63 |