

Appendix 14-A. Climate Change Modelling Inputs (DERM, 2009)

Table 14-1 Adopted Monthly Climate Change Percentage Rainfall Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Dawson Callide

| | Climate Change Model | | |
|-----------|-----------------------------|-----------------------------|-----------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile % Change | 50th Percentile % Change | 10th Percentile % Change |
| January | -9.3 | -1.2 | 16.4 |
| February | -3.0 | 3.9 | 8.6 |
| March | -7.2 | 4.1 | 14.4 |
| April | -21.0 | -15.3 | 6.2 |
| May | -29.6 | -12.9 | 7.2 |
| June | -27.9 | -17.9 | -7.6 |
| July | -13.7 | -6.0 | -5.2 |
| August | -29.1 | -10.6 | -24.9 |
| September | -28.1 | -12.7 | -24.9 |
| October | -10.3 | -6.4 | -5.6 |
| November | -22.5 | 0.4 | 15.4 |
| December | -4.8 | -5.1 | 18.3 |



Table 14-2 Adopted Monthly Climate Change Percentage Rainfall Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Isaac Connors

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | -13.8 | -4.1 | 20.3 |
| February | -7.7 | 2.3 | 10.3 |
| March | -11.4 | 2.4 | 8.9 |
| April | -23.5 | -13.0 | 2.3 |
| May | -28.1 | -14.6 | 2.1 |
| June | -28.5 | -14.7 | -5.4 |
| July | -20.2 | -3.3 | -4.7 |
| August | -34.5 | -11.3 | -22.1 |
| September | -32.5 | -13.3 | -22.0 |
| October | -12.2 | -8.6 | -13.4 |
| November | -40.7 | -3.3 | 16.4 |
| December | -13.4 | -5.2 | 21.4 |

Table 14-3 Adopted Monthly Climate Change Percentage Rainfall Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Nogoa Mackenzie

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | -6.9 | -2.1 | 18.2 |
| February | -8.3 | 2.2 | 10.8 |
| March | -5.0 | 4.3 | 12.0 |
| April | -18.6 | -15.9 | 9.5 |
| May | -33.7 | -15.8 | 8.0 |
| June | -24.8 | -17.8 | -4.3 |
| July | -15.1 | -3.7 | -4.2 |
| August | -34.8 | -11.1 | -22.8 |
| September | -28.4 | -14.7 | -24.9 |
| October | -9.5 | -6.6 | -8.1 |
| November | -26.5 | -0.5 | 18.5 |
| December | -6.4 | -5.8 | 19.8 |



Table 14-4 Adopted Monthly Climate Change Percentage Rainfall Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Lower Fitzroy

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | -16.4 | -2.8 | 18.9 |
| February | -5.7 | 4.1 | 8.6 |
| March | -13.1 | 2.5 | 10.2 |
| April | -23.7 | -12.9 | -0.2 |
| May | -27.5 | -13.5 | 1.5 |
| June | -28.3 | -15.4 | -9.9 |
| July | -19.9 | -4.2 | -5.9 |
| August | -31.0 | -12.4 | -24.7 |
| September | -33.0 | -13.1 | -23.1 |
| October | -13.4 | -8.6 | -12.1 |
| November | -37.8 | -3.5 | 13.8 |
| December | -10.8 | -3.8 | 20.6 |

Table 14-5 Adopted Monthly Climate Change Percentage Evaporation Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Dawson Callide

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | 7.3 | 5.3 | 4.8 |
| February | 8.6 | 4.4 | 4.2 |
| March | 8.8 | 5.2 | 3.5 |
| April | 9.0 | 7.2 | 2.1 |
| May | 9.9 | 8.7 | 3.4 |
| June | 10.3 | 8.4 | 5.5 |
| July | 7.4 | 6.7 | 3.9 |
| August | 5.7 | 6.4 | 3.5 |
| September | 6.2 | 5.9 | 6.6 |
| October | 5.1 | 5.0 | 5.6 |
| November | 5.9 | 5.2 | 4.1 |
| December | 8.2 | 5.4 | 3.6 |



Table 14-6 Adopted Monthly Climate Change Percentage Evaporation Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Isaac Connors

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | 6.7 | 5.4 | 5.1 |
| February | 8.2 | 4.2 | 4.3 |
| March | 8.4 | 5.0 | 3.8 |
| April | 9.0 | 7.9 | 3.2 |
| May | 10.6 | 8.8 | 3.6 |
| June | 11.3 | 8.0 | 4.6 |
| July | 8.2 | 6.0 | 3.3 |
| August | 7.7 | 6.1 | 2.9 |
| September | 7.9 | 6.1 | 5.2 |
| October | 7.0 | 5.4 | 4.4 |
| November | 7.5 | 5.5 | 3.7 |
| December | 8.5 | 5.1 | 3.5 |

Table 14-7 Adopted Monthly Climate Change Percentage Evaporation Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Nogoia Mackenzie

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | 7.2 | 5.3 | 4.6 |
| February | 8.8 | 4.6 | 4.9 |
| March | 9.4 | 5.2 | 6.2 |
| April | 8.4 | 6.7 | 4.7 |
| May | 9.1 | 8.2 | 5.6 |
| June | 10.4 | 8.5 | 5.6 |
| July | 6.3 | 6.5 | 5.4 |
| August | 5.5 | 6.3 | 4.9 |
| September | 6.4 | 5.3 | 1.9 |
| October | 5.6 | 5.0 | 2.3 |
| November | 6.0 | 5.4 | 2.9 |
| December | 8.5 | 5.3 | 3.9 |

Table 14-8 Adopted Monthly Climate Change Percentage Evaporation Adjustments for the Median, 10th-percentile and 90th-percentile Climate Change Models (Scenario A1FI 2050) – Lower Fitzroy

| | Climate Change Model | | |
|-----------|-------------------------|-----------------------------|------------------------|
| | UKMO_HADGEM1 SRES A2 | IAP_FGOALS1_0_g_SRES A1B | MIUB_echo_g_SRES A2 |
| | 90th Percentile | 50th Percentile | 10th Percentile |
| | % Change | % Change | % Change |
| January | 6.3 | 5.2 | 5.0 |
| February | 7.5 | 3.9 | 4.5 |
| March | 7.6 | 4.7 | 4.3 |
| April | 8.7 | 8.0 | 4.2 |
| May | 10.0 | 8.7 | 4.8 |
| June | 10.6 | 7.6 | 6.0 |
| July | 8.2 | 6.1 | 4.6 |
| August | 7.6 | 6.1 | 3.3 |
| September | 7.3 | 6.0 | 5.0 |
| October | 6.7 | 4.9 | 3.9 |
| November | 7.1 | 5.1 | 3.2 |
| December | 8.0 | 4.7 | 3.1 |