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| Parameter | Description | Type of change†† |  | Range |
| CN2.mgt | Initial SCS runoff curve number for moisture condition II | r |  | -0.1 to 0.1 |
| SOL\_AWC().sol | Available water capacity of all soil layer | r |  | -0.05 to 0.05 |
| CANMX.hru† | Maximum canopy storage | v |  | 0 to 20 |
| ESCO.hru | Soil evaporation compensation factor | v |  | 0.8 to 0.95 |
| ALPHA\_BF.gw | Baseflow alpha factor | v |  | 0.001 to 0.01 |
| ALPHA\_BF\_D.gw | Alpha factor for ground recession curve of the deep aquifer | v |  | 0 to 1 |
| GW\_DELAY.gw | Ground water delay time | a |  | -30 to 90 |
| GWQMN.gw | Threshold depth of water in shallow aquifer required for return flow to occur | a |  | -1000 to 1000 |
| RCHRG\_DP.gw | Deep aquifer percolation fraction | a |  | -0.05 to 0.05 |
| REVAPMN.gw | Threshold depth of water in shallow aquifer for “revap” or percolation to deep aquifer to occur | a |  | -750 to 750 |
| SLSOIL.hru | Slope length of lateral subsurface flow | v |  | 0 to 150 |
| LAT\_TTIME.hru | Lateral flow travel time | v |  | 0 to 14 |
| GW\_REVAP.gw | Groundwater “revap” coefficient | v |  | 0.02 to 0.1 |
| EPCO.hru | Plant uptake compensation factor | v |  | 0.1 to 1 |
| SMTMP.bsn | Snow melt base temperature (℃) | v |  | 0 to 2 |
| SFTMP.bsn | Snow fall temperature (℃) | v |  | -2 to 2 |
| SMFMX.bsn | Melt factor for snow on June 21 | v |  | 2 to 4.5 |
| SMFMN.bsn | Melt factor for snow on December 21 | v |  | 0 to 2.5 |
| TIMP.bsn | Snowpack temperature lag factor | v |  | 0 to 1 |
| †CANMX.hru was changed only for range shrubland (RNGB), evergreen forest (FRSE), deciduous forest (FRSD), and mixed forest (FRST) land covers  ††“v” means the existing parameter value was replaced by a given value within the calibration range; “r” means an existing parameter value was multiplied by a factor defined by 1+ a given value within the calibration range, and “a” means a given value is added to the existing parameter value. | | | | |