List of symbols

A	Latitude (degrees)
A	Guelph Permeameter reservoir constant (cm^2)
A	Surface area of inundated floodplain (m^2 or km^2)
A	Catchment area (km^2)
$\sum A_t$	Cumulative surface inundation area (km^2)
B	Environmental base flow release
C	Reservoir area-storage relationship
C	Dimensionless shape factor for Guelph Permeameter
C_G	Specific heat of soil (kJ/kg/°C)
C_{Gd}	Specific heat of dry soil particles (kJ/kg/°C)
C_w	Specific heat of water
D	Guelph Permeameter diameter of hole
D	Draft
Δ	Slope of the saturated vapour pressure vs. temperature curve at air temperature ($kPa.°C^{-1}$)
ΔT	Average measured rise in temperature over depth z_G
e_a	Dalton vapour pressure of the air at the surface
e_a	Actual vapour pressure at air temperature (kPa)
e_d	Saturated vapour pressure at dew point
e_s	Mean saturation vapour pressure at air temperature (kPa)
e_s^*	Dalton saturation vapour pressure at the temperature of the surface
E	Potential evapotranspiration (mm/day, cm/month or inches/month)
E	Loss to evaporation from reservoir surface
E_t^{loss}	Evaporation losses from reservoir surface expressed as a flow rate
ET_o	FAO Penman-Monteith reference evapotranspiration ($mm.day^{-1}$)
γ	Psychometric constant ($kPa.°C^{-1}$)
G	Soil heat flux density ($MJ.m^{-2}.day^{-1}$)
h	Elevation (m)

H	Sensible heat flux
H	Steady depth of water in augered hole for Guelph Permeameter (cm)
H_c	Guelph Permeameter constant depth of water in hole above bottom of hole
I	Inflow from Nyl River (m^3/s)
K	Blaney-Criddle crop constant
K_{fs}	Soil field-saturated hydraulic conductivity (cm/sec)
L	Latent heat of vaporisation of water
L	Guelph Permeameter depth of water in hole
L_e	Latent heat flux of evaporation
L_t	Daily loss due to infiltration and ponding (m^3)
$\sum L_t$	Cumulative water loss (m^3)
n	Penman bright sunshine
N	Penman sunshine
O	Outflow in the form of spill
O_t^{total}	Total outflow from reservoir
p	Monthly percentage of daytime hours in the year
Φ_m	Soil matric Flux Potential
Q	Discharge
Q_c	Guelph Permeameter steady-state flow rate of water into soil
ρ_G	Bulk density of soil ($kg.m^{-2}$)
r	Albedo
R	Mean daily temperature range (˚C)
R	Steady state rate of fall of water in Guelph Permeameter reservoir (cm/minute)
R	Radius of Guelph Permeameter well (cm)
$\overline{R}$	Steady state rate of fall of water in Guelph Permeameter reservoir (cm/s)
R_{ann}	Difference between the mean temperatures of the hottest and coldest months (˚C)
R_n	Net radiation at the crop surface ($MJ.m^{-2}.day^{-1}$)

R_n	Net radiation flux for the surface
R_s	Monthly mean solar radiation at the top of the atmosphere (MJ/m^2/day or mm/day)
S	Soil sorptivity
S	Reservoir storage
S_{cap}	Reservoir storage capacity
σ	Stefan-Boltzman constant (mm.Hg/d)
t	Temperature (˚F)
t	Time (days)
T	Mean daily temperature (˚C)
T	Mean daily air temperature at 2 m height (°C)
T_a	Absolute mean daily air temperature (K)
T_d	Mean dew point temperature (˚C)
T_m	Linacre sea level equivalent temperature (˚C)
T_m	Hargreaves mean daily temperature (˚C)
T_{max}	Maximum daily temperature (˚C)
T_{min}	Minimum daily temperature (˚C)
u	Blaney-Criddle monthly consumptive use (inches)
$\bar{u}$	Dalton mean wind speed
u_2	Mean wind velocity at 2 metres above ground level
w	Gravimetric water content of soil
X	Guelph Permeameter reservoir constant (cm^2)
y	River stage
z_G	Depth of soil heated (m)