Supplementary Materials (S1)

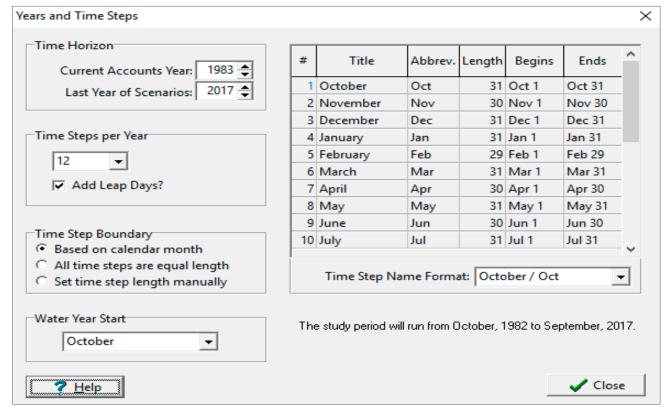


Figure S1. WEAP Model Years and Time Steps.

Table S1. Computation of Nash-Sutcliffe model efficiency coefficient (NSE)*.

Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sum
$Q_0 ({ m m}^3/{ m s})$	1.15	2.29	6.03	15.6 3	24.06	20.16	8.88	5.03	3.59	3.10	2.32	1.45	93.69
Q_s (m ³ /s)	1.22	2.05	5.30	22.1 0	36.76	23.34	12.20	4.61	4.28	3.97	1.32	0.80	117.96
$(Q_s^t - Q_0^t)^2$	0.01	0.06	0.52	41.8 6	161.15	10.09	11.02	0.17	0.48	0.75	0.99	0.42	227.52
$(Q_0^{t} - \bar{Q}_0)^2$	44.32	30.44	3.17	61.2 0	264.22	152.66	1.16	7.74	17.8 1	22.12	30.09	40.48	631.09
NSE													0.64

* based on the formula; NSE =
$$1 - \frac{\sum_{t=1}^{T} (Q_s^t - Q_0^t)^2}{\sum_{t=1}^{T} (Q_0^t - \overline{Q}_0)^2}$$

where, \overline{Q}_0 is the mean of the observed streamflow, Q_s^t and Q_0^t are simulated and observed streamflow at time t respectively.