

Input

Naturalised
Flow ($NatF$)

Parameters

Full allocation
(Fa)

Minimum flow
($MinF$)



Theoretical take (Tt) =

- Fa when $NatF > (Fa + MinF)$
- $NatF - MinF$ when $MinF < NatF \leq (Fa + MinF)$
- 0 when $NatF \leq MinF$

River flow (left) = $NatF - Tt$

Output

Surety of supply (Ss) = $Tt / Fa \times 100\%$
Shortfall (%) = $100 \times (1 - Ss)$

Days of restriction ($Ss < 100\%$)
Days of no take ($Ss = 0$)
Consecutive days of restriction
Volume of shortfall

