$$E_{s,n} = \sum_{p=1}^{W} \left[V_p \times \left(\left(0.37 \times 10^{-3}\right) \times TD_p^2 \times WD_p \times SP_p \right) + \sum_{q=1}^{V_p} \left(SFR_p \times \left(HR_{p,q} - 0.5 \right) \times Z_{p,q} \right) \right] \qquad \text{(Eq. W-9)}$$