| Type | Symbol | Mathematical description | Description | Units |
|------|--------|--------------------------|-------------|-------|
| Pools | $P_{vE}$ | | phosphorus in vegetation | $g\,P\,m^{-2}$ |
| | $P_{oE}$ | | phosphorus in soil biomass | $g\,P\,m^{-2}$ |
| | $P_{dE}$ | | phosphorus in soil solution | $g\,P\,m^{-2}$ |
| Fluxes | $O_{oE}$ | $k_c P_{dE}$ | phosphorus occlusion | $g\,P\,m^{-1}\,a^{-1}$ |
| | $F_{dvE}$ | $P_{dE}\frac{\eta s_E}{n Z_r s_E}$ | phosphorus uptake by vegetation | $g\,P\,m^{-2}\,a^{-1}$ |
| | $F_{voE}$ | $P_{vE}k_v$ | phosphorus losses from vegetation | $g\,P\,m^{-2}\,a^{-1}$ |
| | $F_{odE}$ | $P_{oE}k_d \frac{s_E T}{20}$ | phosphorus mineralization | $g\,P\,m^{-2}\,a^{-1}$ |
| Losses | $O_{oE}$ | $P_{oE}(k_f + k_r k_l s_E^c)$ | phosphorus in organic form | $g\,P\,m^{-2}\,a^{-1}$ |
| | $O_{dE}$ | $P_{dE}\frac{k_l s_E^c}{n Z_r s_E}$ | phosphorus in soil solution | $g\,P\,m^{-2}\,a^{-1}$ |
| Animal fluxes | $AOo_E$ | $k_D P_{oE}$ | detritivores consumption of $P_{oE}$ | $g\,P\,m^{-2}\,a^{-1}$ |
| | $AO_{vE}$ | $k_H P_{vE}$ | herbivores consumption of $P_{vE}$ | $g\,P\,m^{-2}\,a^{-1}$ |
| | $AI_{odE}$ | $k_{DM}k_D(A_F P_{oF} + A_U P_{oU})$ | detritivores mineralized inputs of $P_{vE}$ | $g\,P\,m^{-2}\,a^{-1}$ |
| | $AI_{ooE}$ | $(1 - k_{DM})k_D(A_F P_{oF} + A_U P_{oU})$ | detritivores inputs of $P_{vE}$ | $g\,P\,m^{-2}\,a^{-1}$ |
| | $AI_{vdE}$ | $k_{HM}k_H(A_F P_{vF} + A_U P_{vU})$ | herbivores mineralized input of $P_{vE}$ | $g\,P\,m^{-2}\,a^{-1}$ |
| | $AI_{voE}$ | $(1 - k_{HM})k_H(A_F P_{vF} + A_U P_{vU})$ | herbivores organic inputs of $P_{vE}$ | $g\,P\,m^{-2}\,a^{-1}$ |