

4. Phosphorus flow

flow	magnitude [10^{12} kg(P)/yr]
uptake of PO_4^{-2} by living organisms (balanced by nearly equal rates of loss of phosphorus from living organisms by excretion and death)	
continental	0.2
marine	1.0
extraction of PO_4^{-2} from sediment for fertilizer, detergents, etc. (1980)	0.02
phosphorus in river flow to the sea	0.02
rate of guano deposition on land	0.0004
rate of extraction of phosphorus from the sea in harvested fish (1980)	0.0004