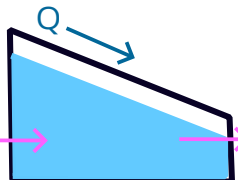


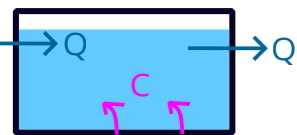
## a) Concept hydrological dynamics

Chemostatic



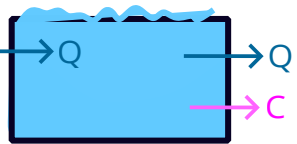
$C =$  outside system

Chemodynamic

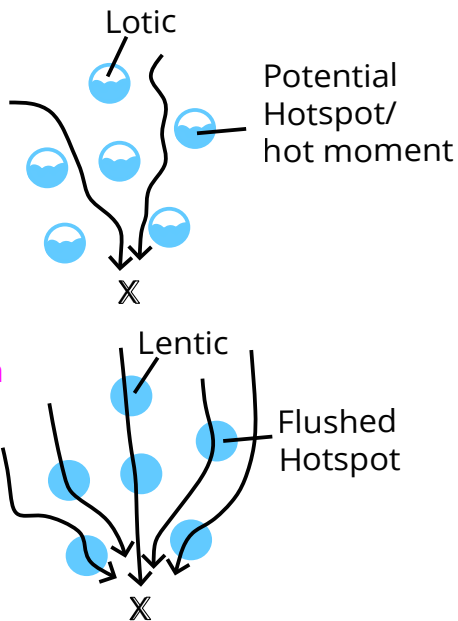


$C =$  generated in system

Chemodynamic

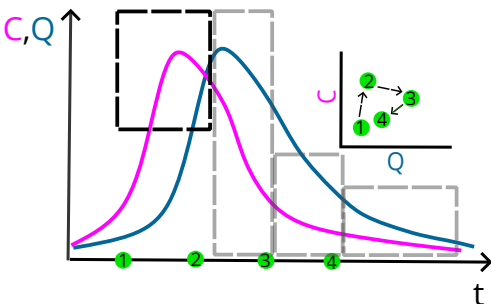


$C =$  mobilized but depleted

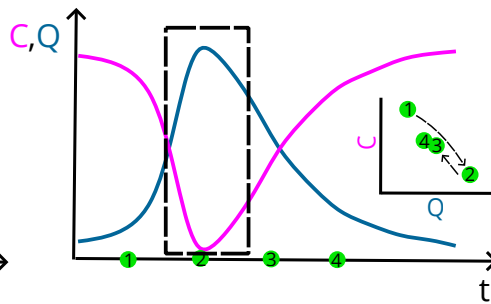


## b) Event-scale geochemical patterns

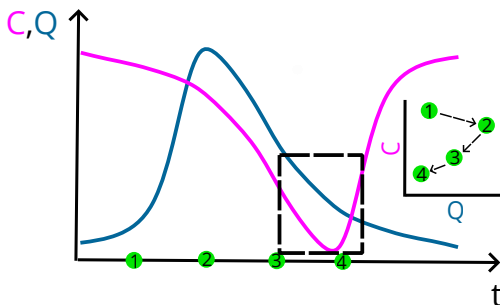
**Loading:** pools in lotic state build up loads and spill when flow/connectivity gets high



**Flushing:** rapid contaminant release without replenishing in lentic state



**Recession:** declines in  $Q$  and  $C$  precede reducing connectivity potential shift from lentic to lotic



**Dilution:** declining  $C$  and  $Q$  still sufficiently lentic to prevent a build up of contaminants

