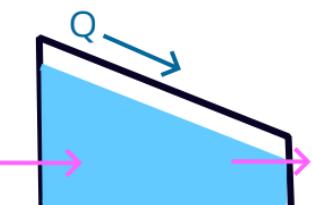


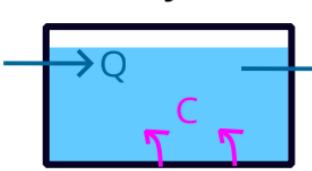
### a) Concept hydrological dynamics

Chemostatic



$C$  = outside system

Chemodynamic

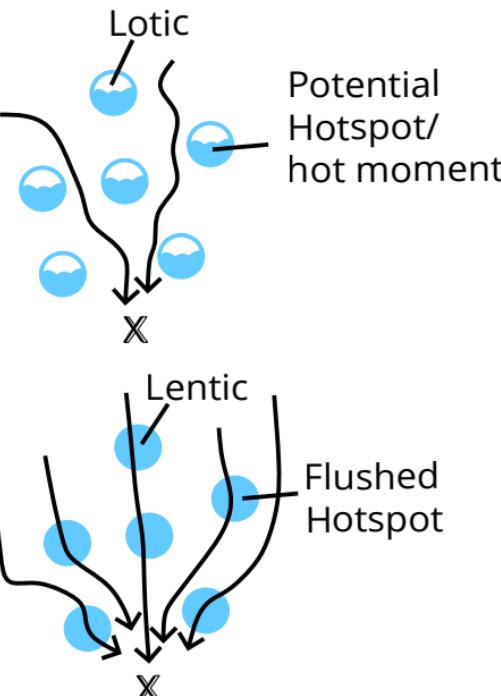


$C$  = generated in system

Chemodynamic

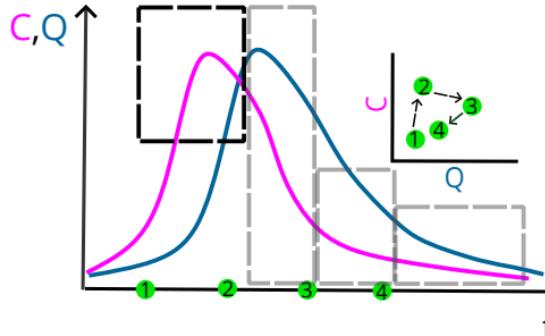


$C$  = mobilized but depleted

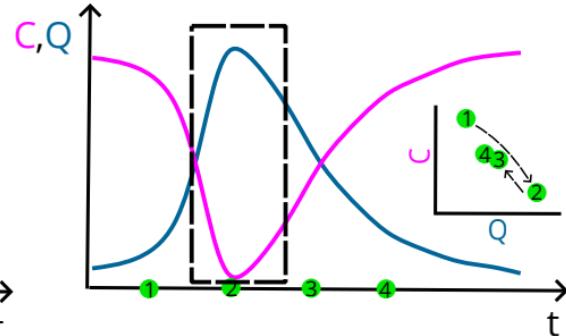


### b) Event-scale geochemical patterns

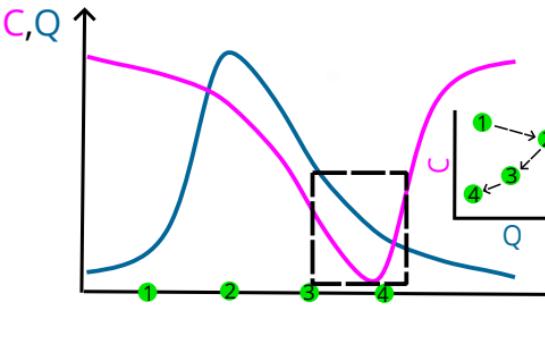
Loading: pools in lotic state build up loads and spill when flow/connectivity gets high



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

