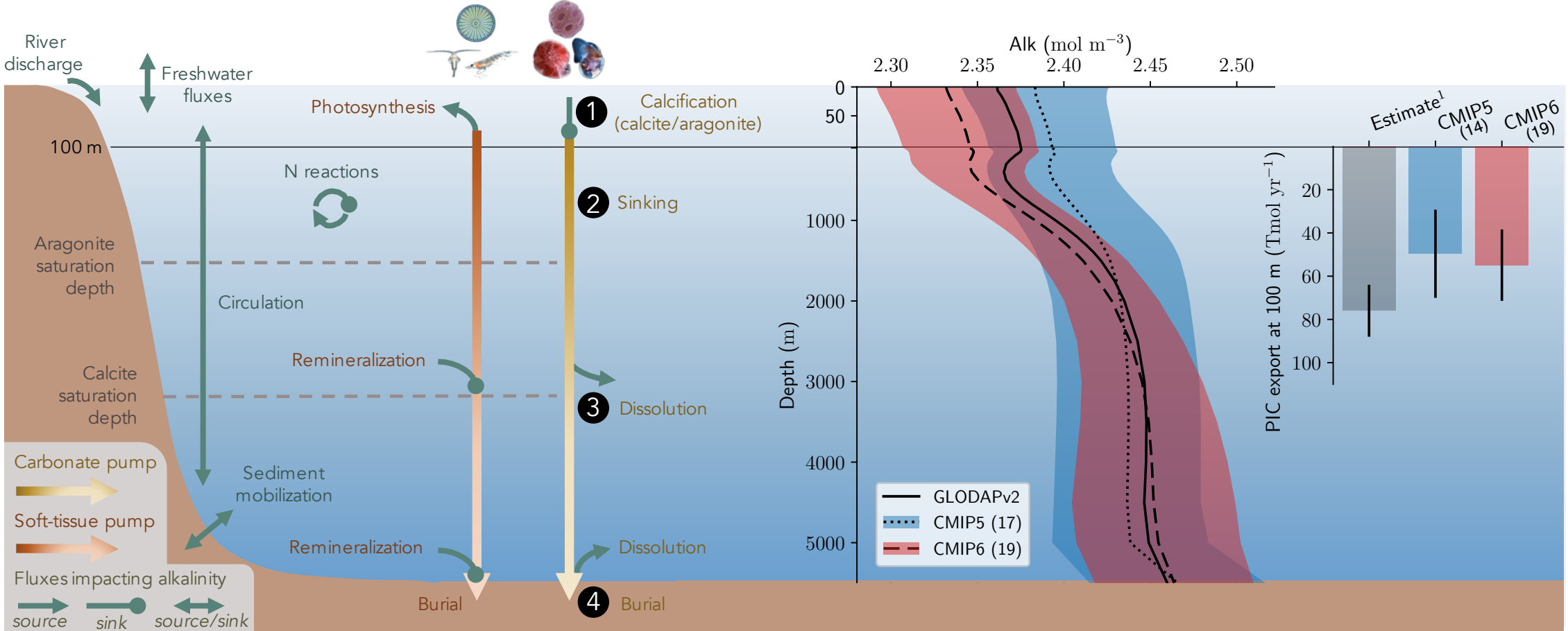
River discharge
Freshwater fluxes
100 m
Photosynthesis
Calcification (calcite/aragonite)
N reactions
Sinking
Aragonite saturation depth
Circulation
Remineralization
Calcite saturation depth
Dissolution
Carbonate pump
Sediment mobilization
Soft-tissue pump
Remineralization
Dissolution
Fluxes impacting alkalinity
source
sink
source/sink
Burial
Burial
Alk (mol m^{-3})
2.30
2.35
2.40
2.45
2.50
Depth (m)
0
50
1000
2000
3000
4000
5000
GLODAPv2
CMIP5 (17)
CMIP6 (19)
PIC export at 100 m (Tmol yr^{-1})
20
40
60
80
100
Estimate[1]
CMIP5 (14)
CMIP6 (19)