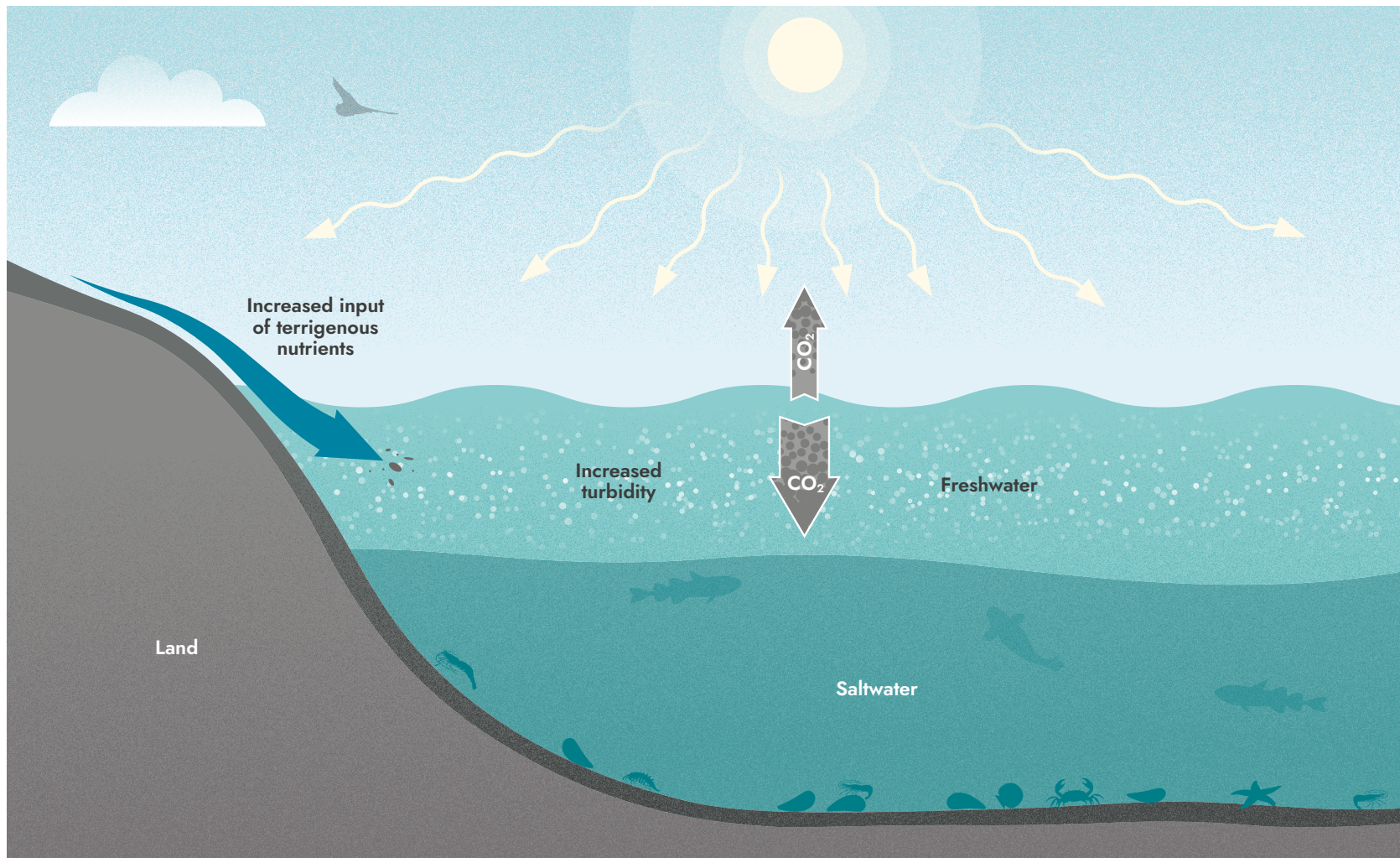




INCREASED RESPIRATION AND DEOXYGENATION

Increased input of terrigenous nutrients, warming and freshening of surface waters increase microbial respiration and remineralization of carbon and nitrogen. The result is deoxygenation, increased turbidity, reduced carbon sequestration and storage, reduced export of organic matter to bottom-dwelling organisms and less production available for higher trophic levels