

Upwelling

Upwelling is an important physical process supporting life in the oceans

- Upwelling brings nutrients from deep water to the sunlit upper layers at the ocean's surface
- Nutrients and sunlight are needed for phytoplankton to grow
- Like other plants, phytoplankton use carbon dioxide (CO2) and produce oxygen (O₂)
- Phytoplankton growth, known as primary productivity, provides food for many species and supports the entire food web
- Freshwater on the surface, for example from melting ice, can prevent deep water from mixing upwards