



Plankton and Sulfur Namibia

Off the coast of Namibia, the Benguela Current flows north and west from South Africa. It is enriched by iron and other nutrients from the Southern Ocean and from dust blowing off African coastal deserts. Easterly winds push surface waters offshore and promote upwelling near the coast, which brings up cold, nutrient-rich waters from the deeper ocean. These interactions can make the ocean come alive with color.

Bacteria in oxygen-depleted bottom waters consume organic matter and produce large amounts of hydrogen sulfide. As that gas bubbles up into more oxygen-rich water, the sulfur precipitates out and floats near the surface in yellow-green patches.

Further offshore, milky green water may be a bloom of phytoplankton. As these organisms consume sunlight and nutrients, they also consume oxygen and sometimes deplete it from the water. At the same time, those oxygen-depleted waters help sulfur-producing bacteria thrive.