

SC.912.L.17.20 – Human Impact – Example 1 Answer

Salt water is an abundant resource but unusable for irrigation and drinking. As demands on freshwater sources increase, the use of desalination processes to remove salt from ocean water is increasing. A concern of desalinating water is the large amounts of recovered salts that are returned to the ocean. Which of the following describes the most likely impact of desalination on the surrounding ocean environment?

A. Methane gas would pollute the ocean environment as shoreline organisms begin to die and decay.

B. Alteration in ocean salt levels would cause loss of species and unbalanced populations in marine food webs.

C. Nonrenewable resources in the ocean environment would become depleted and upset the ecosystem's balance.

D. Increased levels of salts and minerals in the ocean would result in overpopulation of marine bivalves due to strengthened shells.

Answer

B. Alteration in ocean salt levels would cause loss of species and unbalanced populations in marine food webs.

Any change in abiotic factors (such as salinity) will have effects on the organisms in an ecosystem.