



Nutrient removal from water re-use and recirculating aquaculture systems discharge

Abstract

In aquaculture, nutrient loading is defined as the difference between nutrients supplied with fertilizers and feed and nutrients harvested in the form of finfish, crustaceans, molluscs and seaweeds. Nutrient loading occurs in all aquaculture production systems, ranging from extensive to super-intensive, and from completely open (cages, pens) to almost completely closed recirculating aquaculture systems (RAS). removing these nutrients is mandatory to maintain water quality in all systems as water re-use and recirculating aquaculture systems. The techniques of denitrification reactors, By passing water in wetlands, Ozone, Microalgae are used in waste water treatment to remove COD, BOD, N, P, heavy metals and pathogens.

Keywords: recirculating aquaculture systems (RAS), water re-use systems, phosphorus, nitrogen.

