WATER RESIRCULATION OF MILKFISH POND WITH SLOW SAND FILTER

Name : Chandra Tri Febri Wahyudi
ID  : 3306 100 055
Major : Environmental Engineering FTSP-ITS
Supervisor : Prof. Dr. Ir. Wahyono Hadi, MSc

Abstract

Pond is a building in the beach area that can be utilized in economical cultivation for valuable marine biota. Brackish water is often used by farmers to make a fish ponds. However, not all areas have a good water resources to be used as fish breeding by the farmers, which raised the problem of water quality in order to get a good pond water. A treatment is needed to lower the analyzed contaminant such as total coli, turbidity, and organic substances (Permanganate Value), by slow sand filters.

The study is conducted to determine effectiveness of slow sand filters to decrease the parameter value of the total coli, turbidity, organic matter. The brackish raw water is taken from the pond from keputih. At the introductory study, the brackish raw water quality is noted 10000 per 100ml in total coli, organic matter 13.37 mg/l, turbidity of 4.80 NTU.

Based on analysis done, the efficiency decreased on the third day and reached 42.6% on day 30 to reach the range of 90-95%. The ability of the filter in removal salinity, total coli, turbidity, organic substances, makes the processing of slow sand filters can be used to process water pond.

Key words: slow sand filters, total coli, turbidity and organic matter.