

## **ABSTRACT**

### **LAND SUITABILITY ANALYSIS OF ABALONE (*Haliotis* sp.) CULTURE THROUGH PHYSICAL CHEMICAL PARAMETERS IN CIKUNYINYI BAY**

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The coast of Pesawaran, which is a part of Lampung Bay, has a great potential in the marine aquaculture development. One location that has significant potential is Cikunyinyi Bay. Aquaculture intensification on the Cikunyinyi Bay might degrade water quality which led to culture failure. The purpose of this study was to analyze land suitability level of Cikunyinyi Bay for abalone (*Haliotis* sp.) culture based on physical and chemical parameters. This research was conducted from October to November 2013. The data were taken from 8 sampling points. Sample data processing was held at Water Quality Laboratory in Balai Besar Pengembangan Budidaya Laut, Lampung. The method used in this research was descriptive exploratory method and for location determination, purposive sampling method was used. Matching and scoring method was used in this research. Here is a range of physical and chemical parameters were obtained at the time of the study : Dissolved oxygen (DO) from 4.15 to 6.03mg/L, Salinity 31 - 33ppt, Temperature 28.9 – 31.4°C, Depth 3.5 – 10.5m, Brightness 1.1 – 8.2m, the flow speed from 0.2 to 0.43m/sec, degree of acidity (pH) from 7.54 to 8.16, Phosphate 0.060 - 0.087mg/L, Nitrate 0.021 – 0.029mg/L. Matching and scoring that had been done showed value of 64%, with the level of conformity is “not suitable”. It means this area has permanent barrier, so it can not be forced to culture abalone.

*Keywords: abalone, cikunyinyi bay, land suitability.*