



## ABSTRACT

The increasingly intensive utilization of shore areas and the existing shore destruction by erosional actions have been driving forces for the study of interaction between oceanic factors and physical conditions of shore that is causing the erosional occurrence and deposition of shore at Manado bay.

The purpose of this study is to analyze the effects of artificial forms occurring at Manado Bay on sediment transportation by longshore currents. In addition, this study is intended to know the working of oceanic factors, such as waves, currents, and tides that caused the existencies of erosion and deposition areas spreadings at Manado Bay.

This research was conducted by survey method. The data collected was shore profile, tides and waves, current, granulometry, erosion and deposition process. The measurement of data was conducted at stations which had been established based on batimetical maps, field surveys, and the structure in the shoreline. Then the results of data processing and direct measurements was descriptively analized in order to obtain the information of phenomenon occurred in the research areas.

Based on the study results, it has been seen that the structure has become the cause of sediment transportation hampering by longshore currents. In turn, the hampering of sediment transportation was resulted in the shortage of sediment supplies in the shore of current direction. The erosion was occurred in the shoreline regions because the number of sedimentation materials deposited by wave swash are less than those materials that was bringing back by the backswash.