For the better understanding of long-term variations of water quality in Jinhae Bay after establishment of special law, we analyzed the archive data monitored in Jinhae Bay during the last 17 years (1997-2013). And change on fish catch due to the variations of water quality was investigated. A marked decrease in the number of red tide occurrence is due to the effectiveness of the law and sewage treatment plant that has targeted the reduction of COD in the effluent water since early 2000. Although the improvement of water quality, increase in fishery production was not observed in Jinhae Bay. For the recovery of fishery production, processes for restoration of entire ecosystem such as restoration of artificial intertidal flat and seaweed bed and remediation of organic-rich sea bed should be accompanied with improvement of water quality.