

Topics: Water quqlity issues

Typical change of sediment at the Sea of Hibiki, the Seto Inland Sea during last ten years

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The sediment of enclosed coastal sea area shows a pollution record of the water body. The Seto Inland Sea is the largest enclosed sea area in Japan, and it is also one of the most productive enclosed coastal sea in the world. Many efforts to conserve the Seto Inland Sea have been taken for two decades and more, and many lessons have been learned through those efforts.

However, the improvement of the sedimental environment in this area could

hardly be recognized from the results of surveys (1st : 1980s, 2nd: 1990s).

Especially, the sediment of a part of the sea of Hibiki, the Seto Inland Sea, which is almost open sea along a rural district with partial residential area, has been more serious pollution condition. In order to clear the phenomena, the authors investigate the condition using changes of pollutant loads from effluents, census data and data of water qualities of the rivers and the sea.

Recently, sedimental condition of the St.A seems to become worse condition. Furthermore, the water quality around the St.A has shown a clear change during last ten years, particularly, Chl-a concentration has shown a typical change. St.A locates north of the offshore from Shimonoseki City, which is most western end of the Seto Inland Sea. The population of Shimonoseki City has not changed since the 1960s, however, population has been shifting from the old town to the new one, that locates the northern part of Shimonoseki City. Recently, the water pollution of the river flowing through the new town has remarkably advanced. As a result, the nutrients concentration of the St. A increases and the production of algae becomes intense. Also, the concentration of Chl-a in this area has obviously rise from the middle of 1980s. It is conceivable that the pollution is a typical case caused by the increasing of domestic wastewater discharge.

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