浚渫が水環境に及ぼす影響

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Abstract

Dredging to reduce nutrient loads from sediments is still performed in Japan especially in eutrophic lakes. No field data, however, so far have shown a long term reduction in nutrient efflux from sediments due to dredging. Rather, disturbance to the benthic ecosystem, due directly to dredging or embankments of dredged sludge to protect reclaimed land, seems to reduce the natural water quality control. A case study at Lake Suwa, Japan, showed a negative correlation between fisheries yield and the cumulative amount of dredged sludge. A case study at Lake Nakaumi, Japan, showed that the potential amount of nutrient removal by shallow coastal ecosystem is as large as dredging. Therefore, dredging should be more carefully performed when its purpose is to reduce nutrient loading.