and Hiroshima Bay. in nearly the same style from 2003 to 2007. I want to discuss about the characteristics of these action plans and evaluate to what extent they have comprehensive feature from the viewpoint of "the guideline for comprehensive management of coastal area". And I want to analyze why they don't reach to the guideline level.

# Research initiative on northwest pacific sea marine environment protection

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### **Background and Policy**

Along the coast of the seas surrounding Japan, fishery troubles have been caused by drifted refuge, as well as breakout of red tide and Echizen Kurage (jellyfishes) and as the countermeasures against these troubles a great deal of attention is turned on making a maritime basic plan in accordance with the Basic Act on Ocean Policy. To maintain a suitable level of water quality in public, the comprehensive countermeasure for reducing environmental loads is needed in accordance with the program for reducing environmental loads discharged from the land-based areas.

In this research, we grasp current status of water pollution in waters surrounding Japan and the loads discharged from the areas and a simulation model of water pollution is developed to assess the land-based countermeasures of the countries concerned. We further discuss the land-based countermeasures necessary to recover the desired maritime environment in waters surrounding Japan.

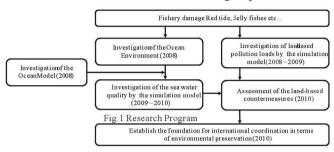
#### **Objectives**

(1)In time of an advance in eutrophication and red tide drifting in waters surrounding Japan, current status of water pollution and pollution loads discharged by land-based areas are investigated.

(2) Using the simulation model of water pollution, the land-based countermeasures of the countries concerned are assessed.

### Results of the Research

The outcome of this research is expected to establish the foundation for international coordination in terms of environmental preservation, including the reduction in pollution loads mainly based on the land-based countermeasures such as sewerage construction necessary for recovering the desired maritime environment in waters surrounding Japan.



## The introduction support for Total Pollutant Load Control System (TPLCS) in the countries of the East Asia

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# 1. The Preservation from the Enclosed Coastal Seas in Japan

In Japan, TPLCS of COD<sub>Mn</sub>, T-N and T-P is applied to the large enclosed coastal seas, where the effluent regulations by concentration are insufficient for achieving environmental quality standards.

TPLCS was established in 1979 to achieve environmental quality standards by reducing total land-based load from household, industry and other sectors such as livestock, land and aquaculture, respectively with estimation.

As a result, level of water quality in target seas of Japan has been improved steadily.

