



Preservation of the marine Environment in China

**CHINA NATIONAL
ENVIRONMENTAL MONITORING
CENTER (CNEMC)**

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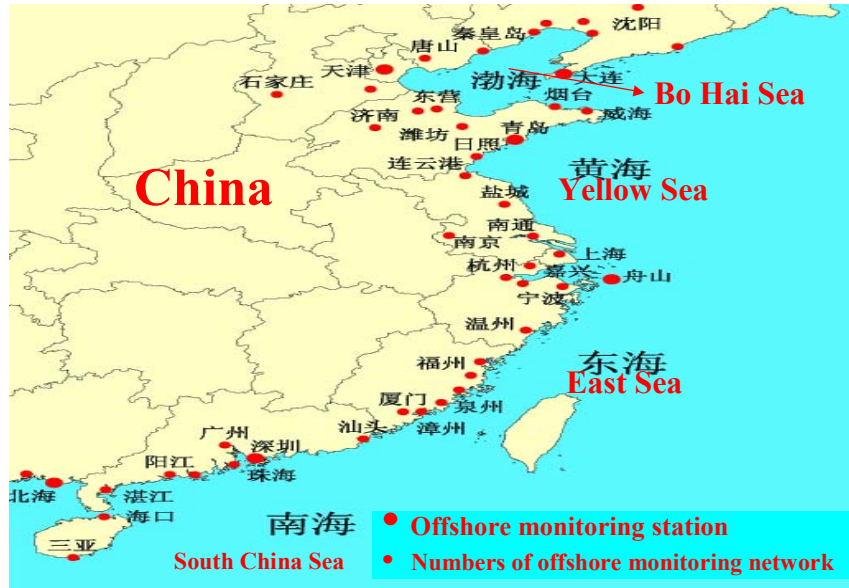
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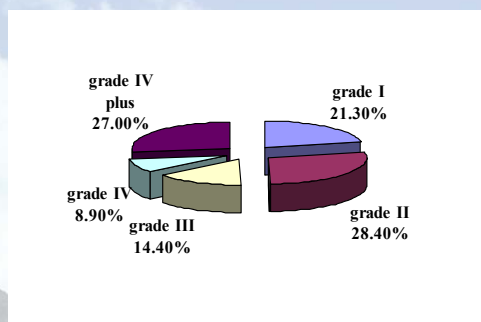
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1. Offshore monitoring network



Sea Water quality overview in offshore area



Grade	Percent%
grade I :	21.3%
grade II :	28.4%
grade III :	14.4%
grade IV :	8.9%
grade IV plus:	27.0%

Fig. Water quality in offshore area in 2002

Comparison of Sea water Quality from 1994 to 2002

There were 2896 sea water quality monitored sites for offshore, the results as: the sea water of Grade II and grade IV in most monitored sites. More than 50% present of total is grade I and II in 2000 and 2002, the sea water quality has been improved.

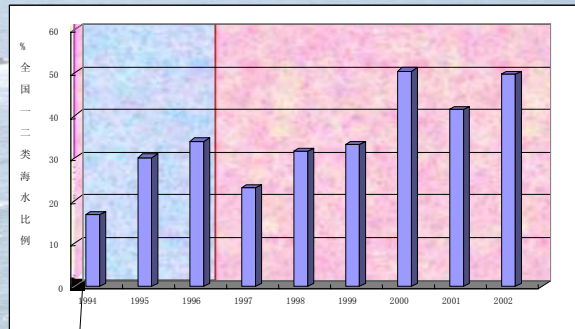
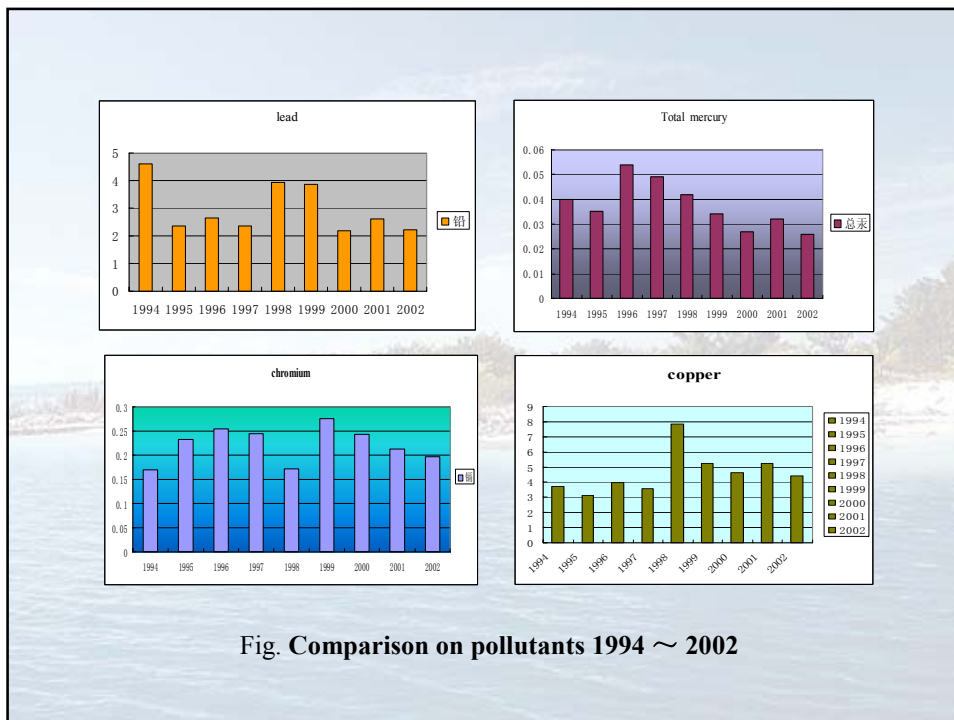
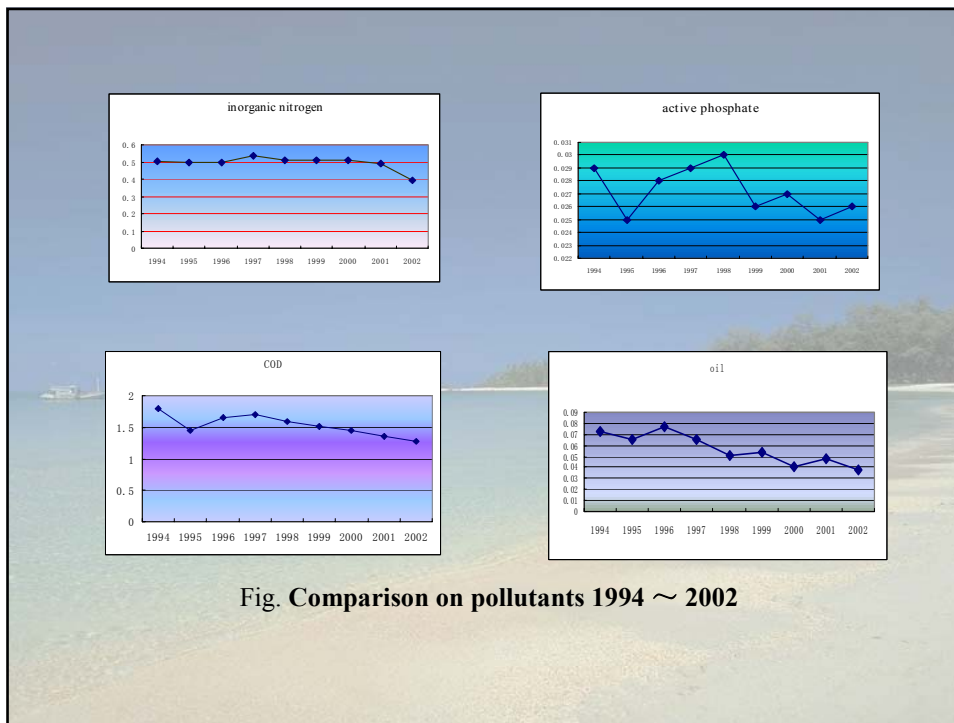


Fig. Comparison of Percentage of grade I and II in Chinese offshore

The main pollutants

Main affecting pollution indicators where more failure is detected are inorganic nitrogen and active phosphate. Failures in indicators as oil, COD and lead are detected in some parts of the sea area. Some individual cases also detected that are resulted from heavy metals like copper, mercury and cadmium.

During 1994 to 2002, comparison the different pollutants, the results as: the consistency of inorganic nitrogen, COD, oil and active phosphate has been decreased.



3. The bathing place water quality monitoring

From 29, June, 2002, 19 bathing place in ten cities has been monitored, the results shows: in 240 times monitoring, 50.8% of bathing places is grade I , 37.1% of bathing places is grade II ,10.8% of bathing places is grade III, 1.3% of bathing places is grade IV.

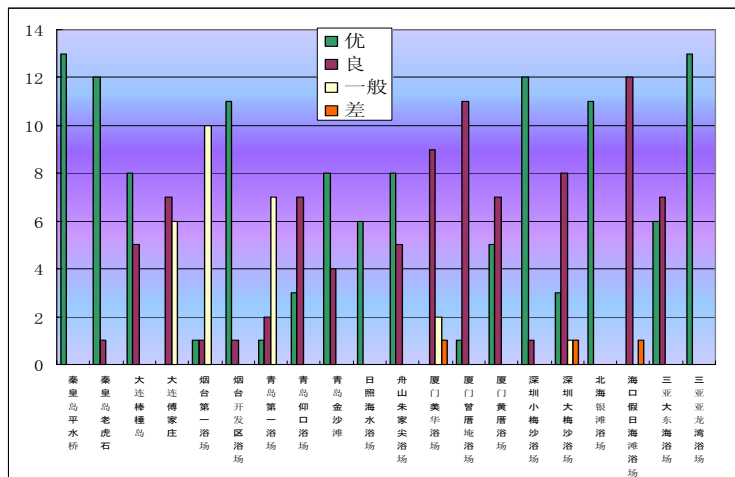
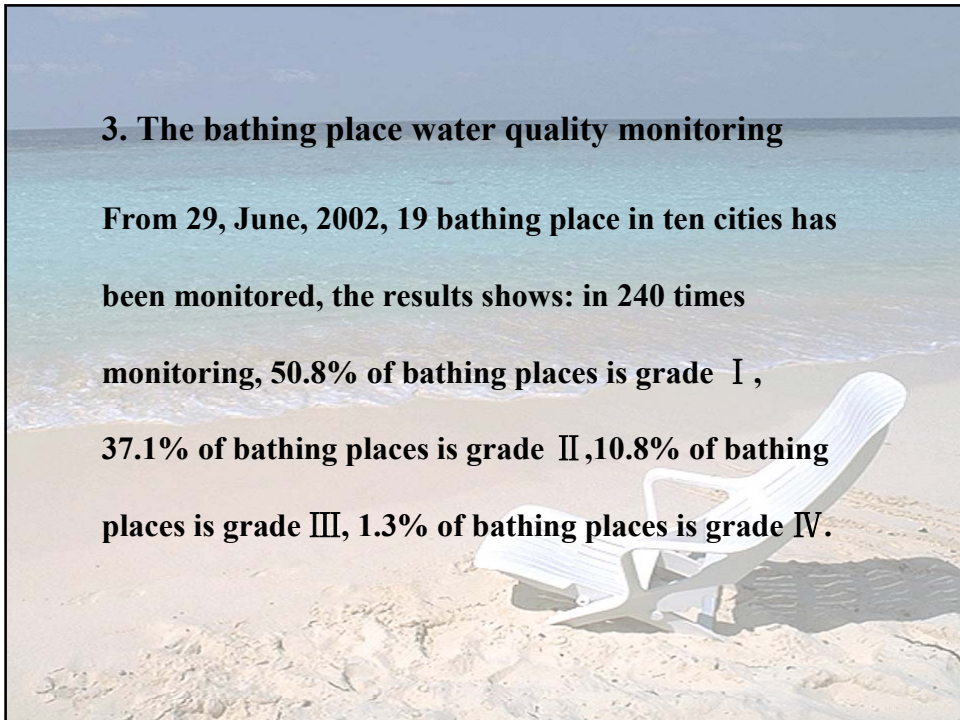


Fig. The bathing place water quality in coastal cities

4. Red Tide (HAB) monitoring

The results of monitoring shows:

In 2000, 28 times red tide was occurred in Chinese offshore, what an increase 13 time occurred in comparison with 1999.

In 2001, the red tide was occurred in Chinese sea is 77 times, economic lost 10 hundred million, area is 1.5 ten thousand Km², 49 times increased than 2000.

➤ The frequency of red tide increased

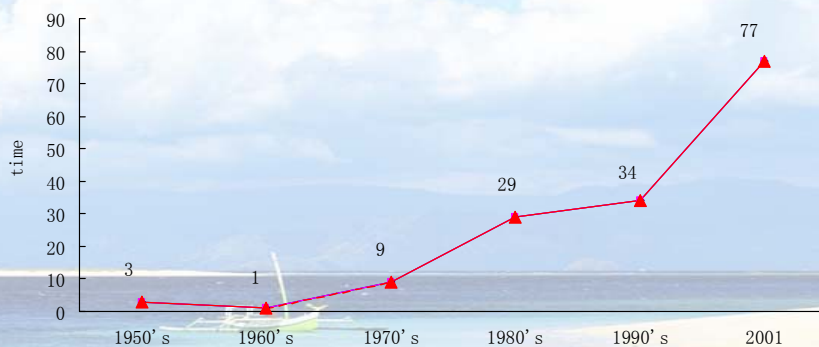


Fig. The red tide was occurred in Chinese sea water

4.1 The main reasons of red tide occurred

● **Sources of sea water pollution:**

Industrial waste water discharged into the sea

Municipal waste water discharged into the sea

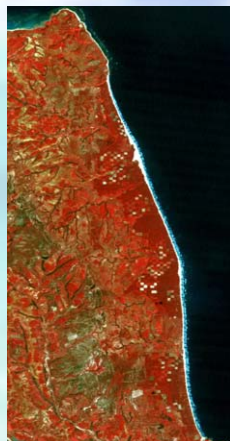
Non-point sources

cultivation by sea water

● **Climate**



➤ The sea water quality increased and the ecological degradation of offshore

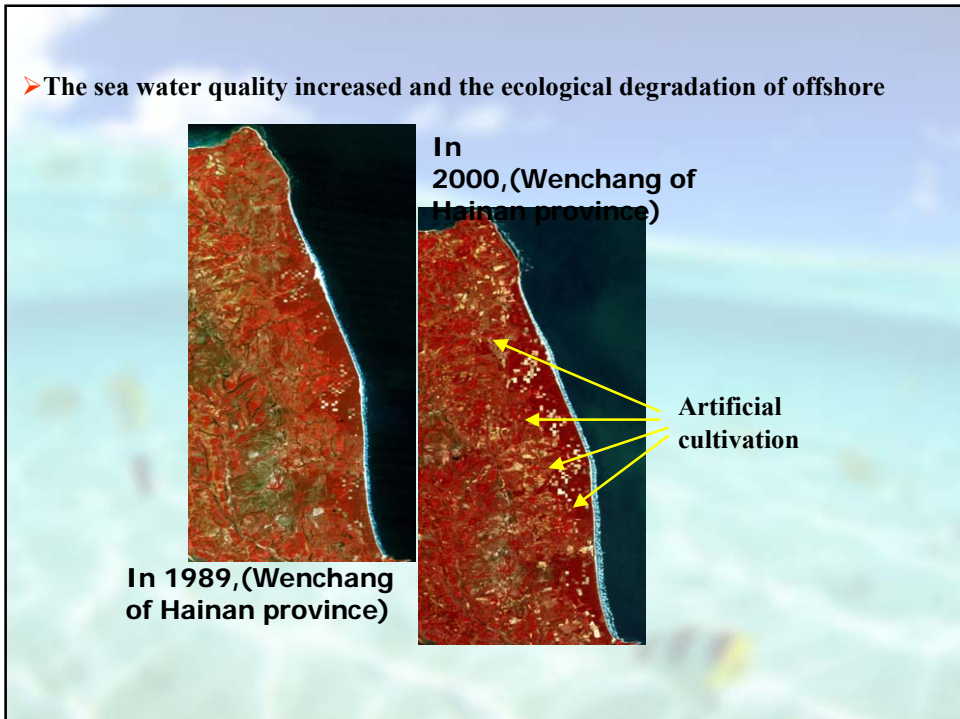


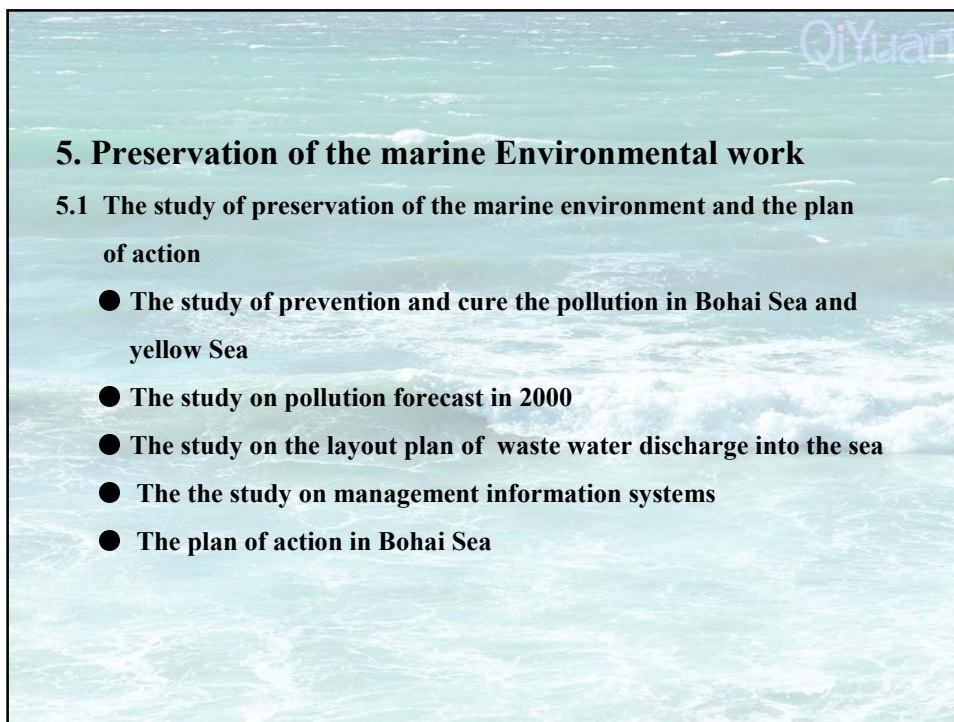
In 1989,(Wenchang of Hainan province)



In 2000,(Wenchang of Hainan province)

Artificial cultivation





5. Preservation of the marine Environmental work

5.1 The study of preservation of the marine environment and the plan of action

- The study of prevention and cure the pollution in Bohai Sea and yellow Sea
- The study on pollution forecast in 2000
- The study on the layout plan of waste water discharge into the sea
- The the study on management information systems
- The plan of action in Bohai Sea



6. Preservation of the marine Environmental law and regulations

6.1 Law

- The Law for Prevention of the marine Environment
- The managerial ordinance for depollution from land
- The managerial ordinance for depollution of coastal engineering
- The managerial ordinance for depollution of dismantle shipping

6.2 Standard

- The Standard of Sea water Quality
- The Standard of fish culture water Quality
- The Standard of Waste Water Discharge
- The Standard of pollutants discharged by shipping
- The Standard of Waste Water Discharge by petroleum industry

7. International cooperation

State Environmental Protection Administration has cooperated with more than 20 countries. China EPA has cooperated with UNEP. We would like study the advanced technology with the other countries and change for information.

