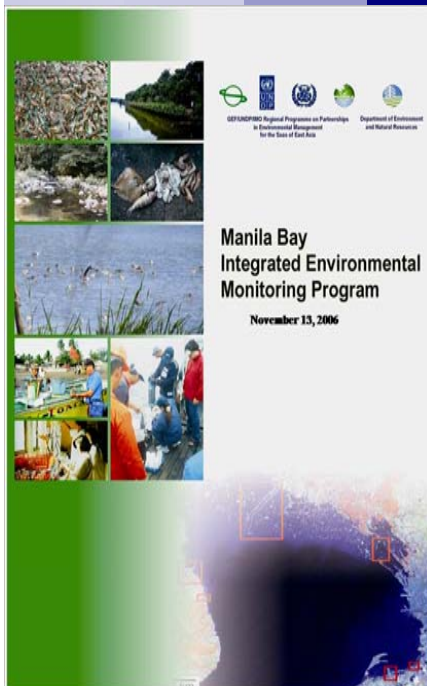


ELVIRA Z.SOMBRITO*
ERLINDA A. GONZALES**

Promoting Interdisciplinary Research: Integrated Environmental Monitoring Program of Manila Bay



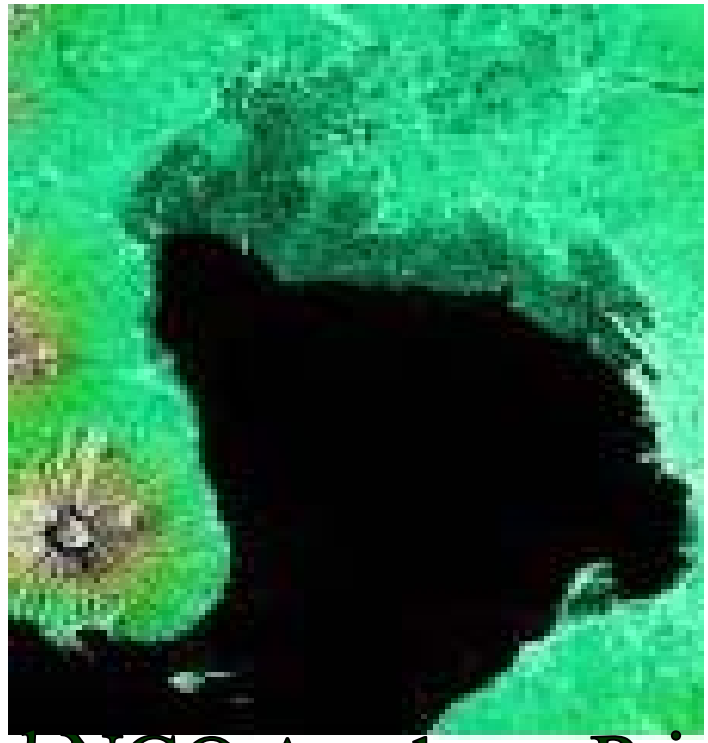
EAS 2009, MANILA

***PNRI, DOST**

****MBEMP, DENR**

Operational Plan for the Manila Bay Coastal Strategy
Integrated Environmental Monitoring Program

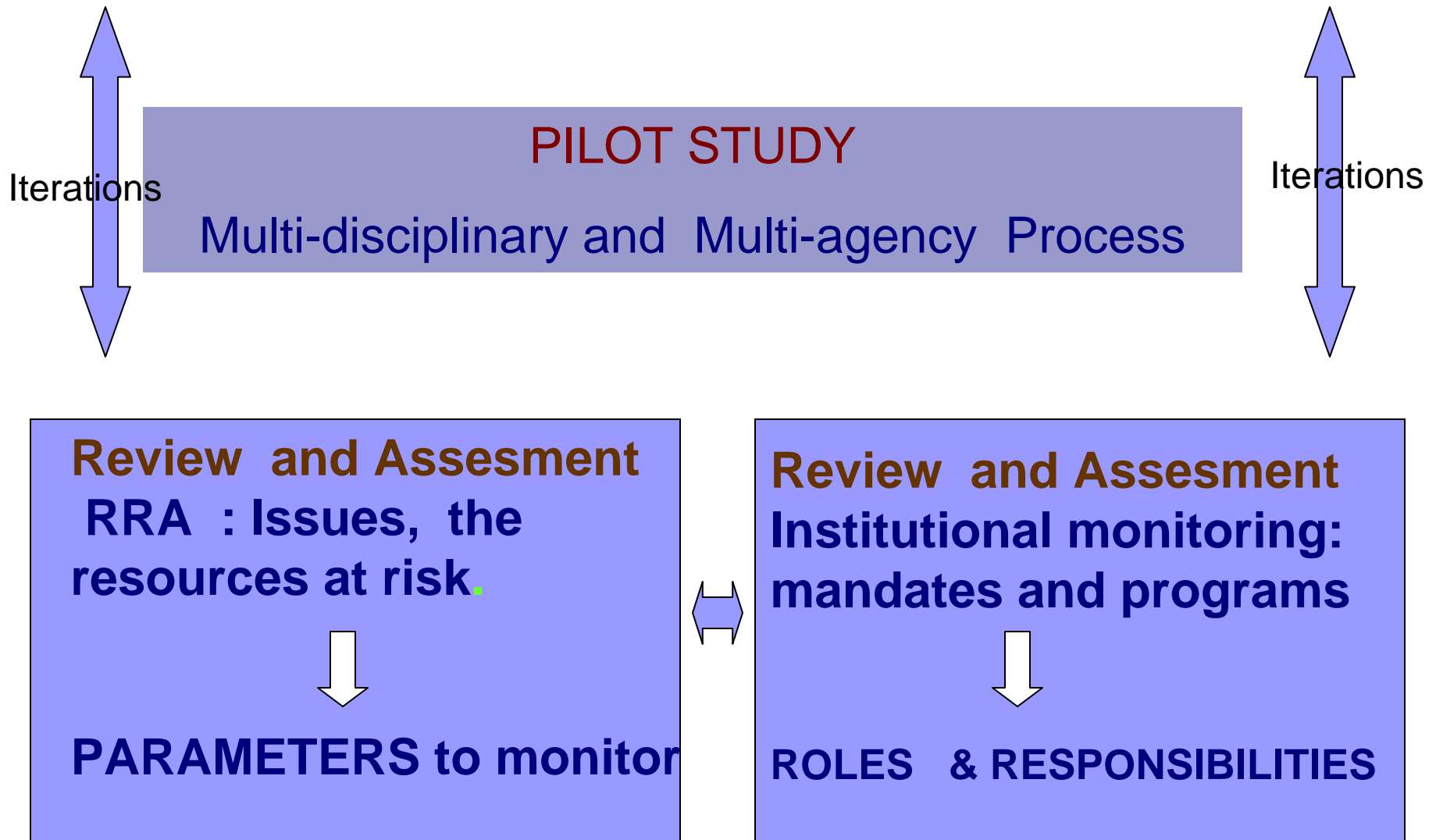
Economic Historical Social Political Cultural
Industry Domestic Agriculture Maritime



LGU National NGO Academe Private Citizenry

Development

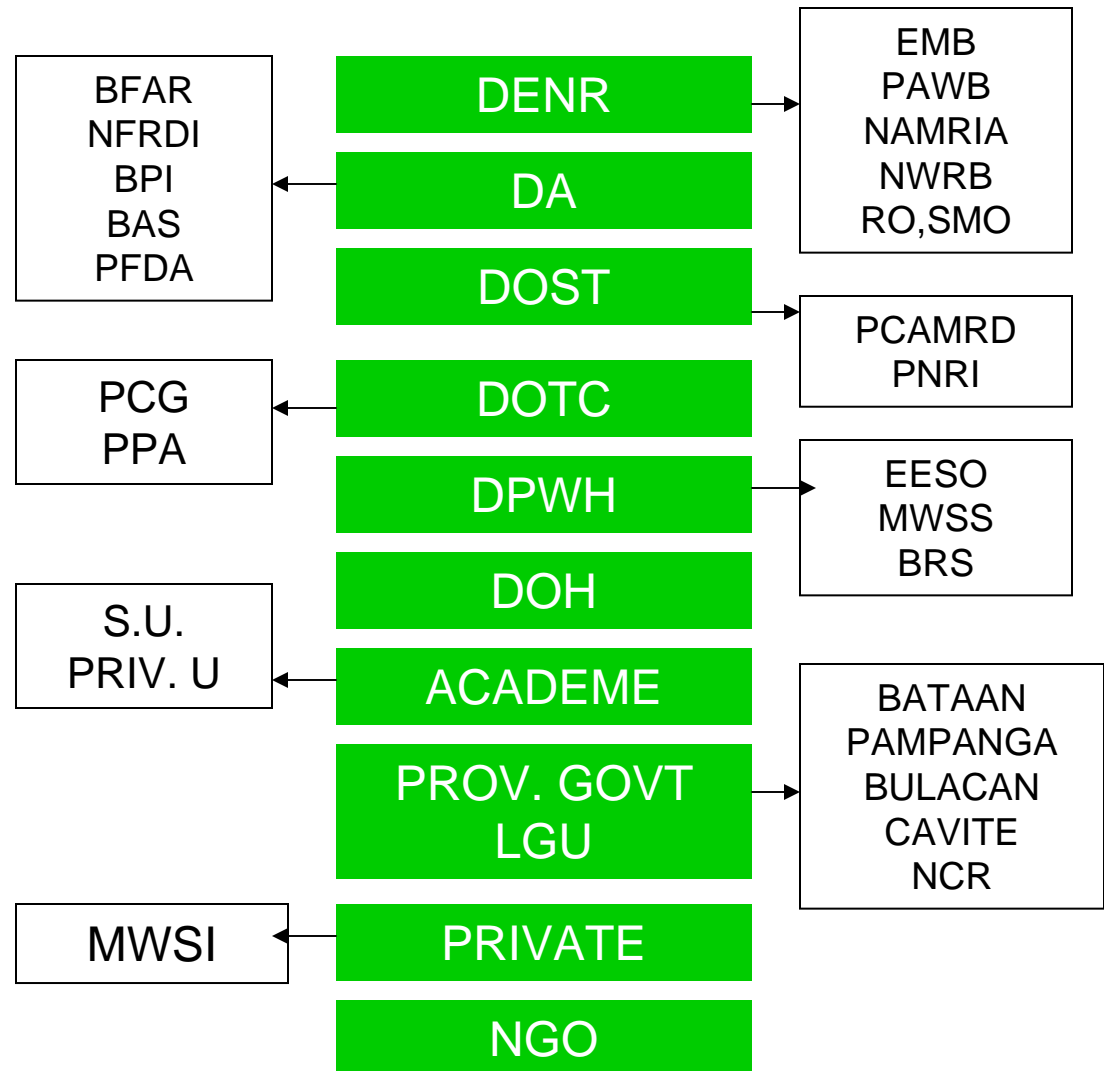
Integrated Environmental Monitoring Program



Characteristics

Integrated Environmental Monitoring Program

- Inter-agency
- Cost sharing
- Data sharing
- Multi-disciplinary
- Cross-sectoral
- Inter-linked with other initiatives
- Includes the resources and its physico-chemical environment
- 5- year implementation, review & assessment process
- Addresses special concerns



Components

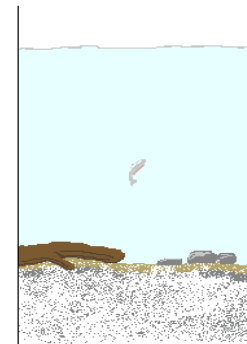
Integrated Environmental Monitoring Program

- Monitoring of the Bay resources including habitats



- Monitoring of the resource environment

physico-chemical characteristics of the water column and sediment and biota



- Health Concerns

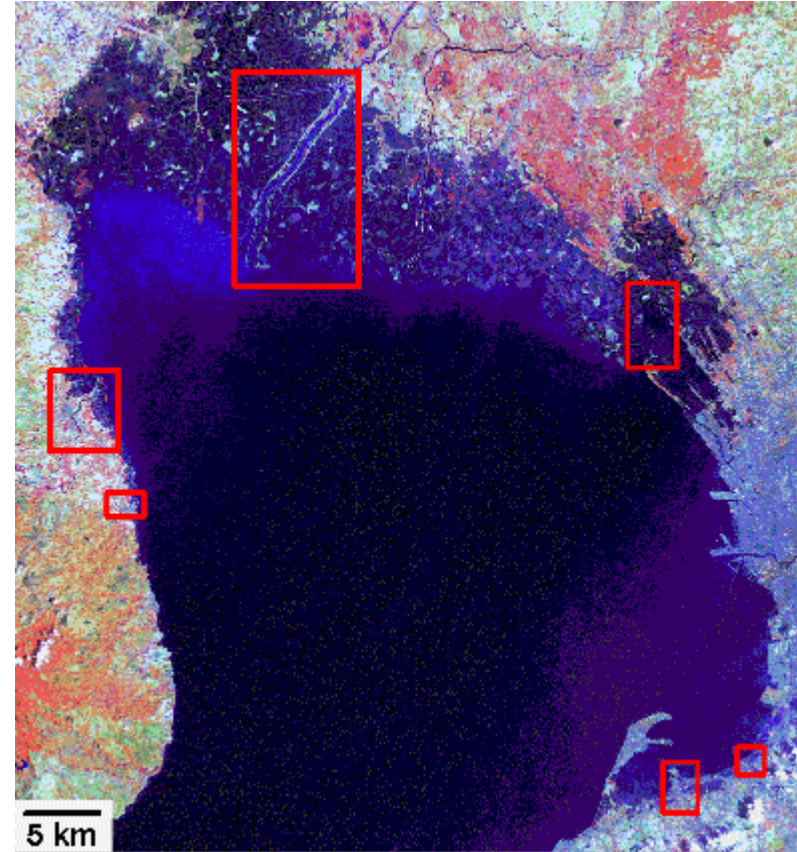
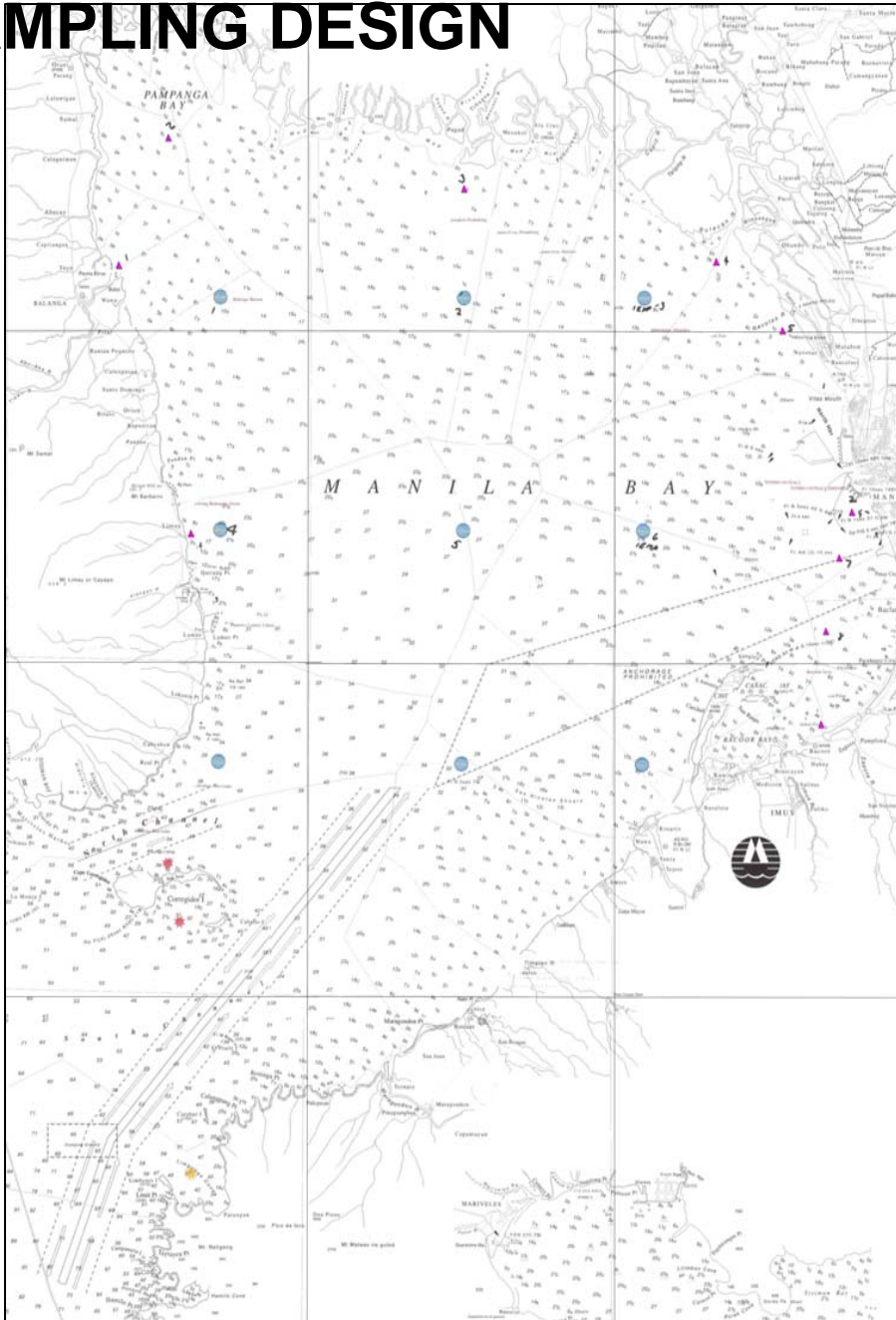
PSP in shellfish

Coliforms in bathing waters

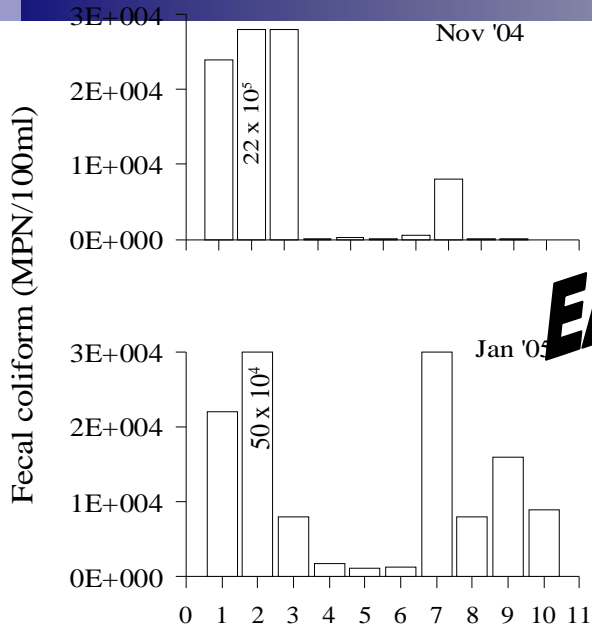
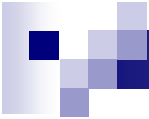
- Birds , quantity and diversity



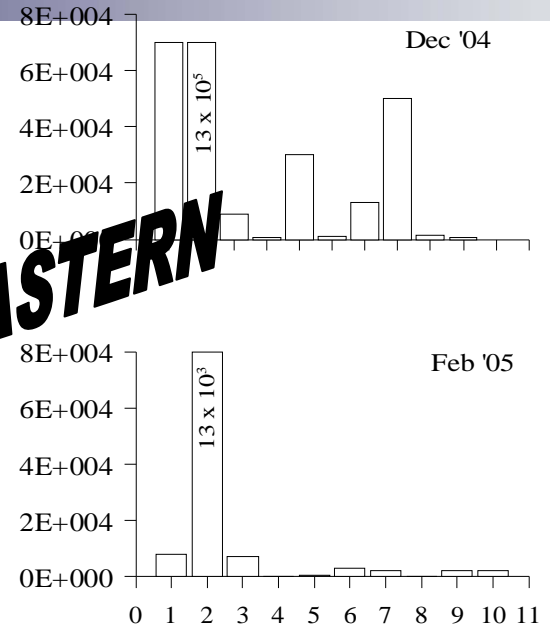
SAMPLING DESIGN



Orion, Balanga, Pampanga, Bulacan-Meycauayan, Zapote, and Imus

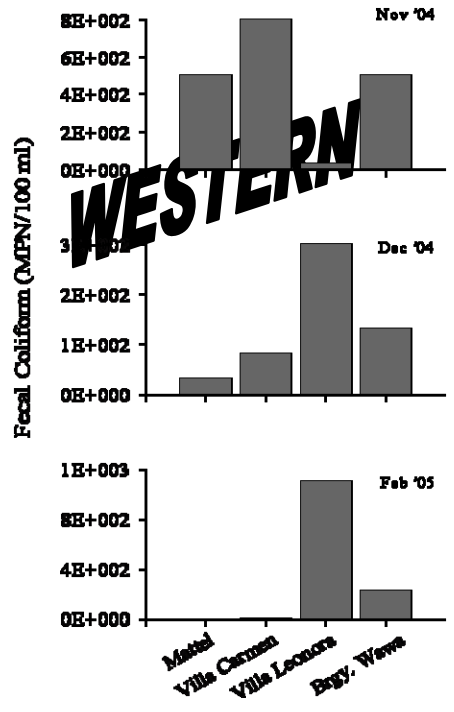


EASTERN



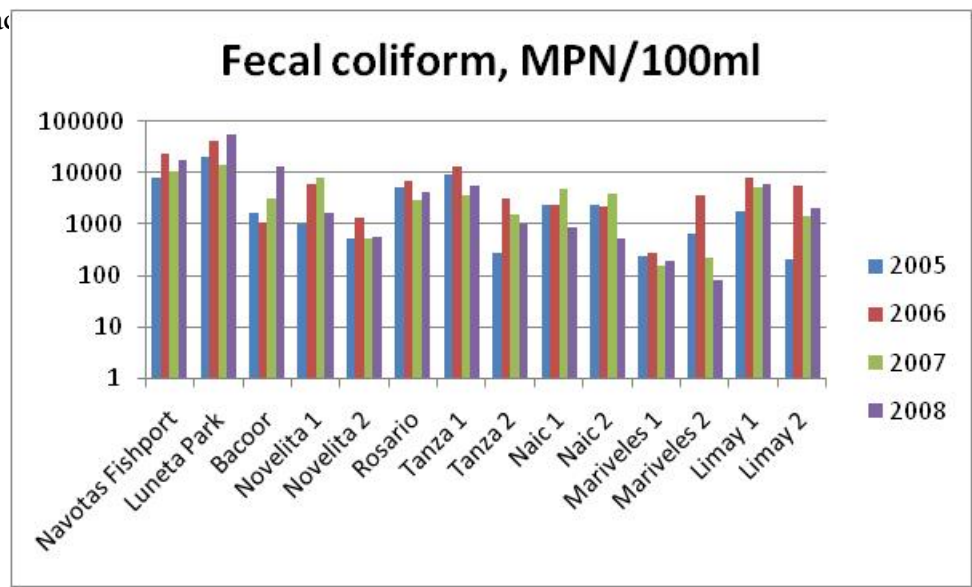
Legend:

Navotas
Luneta
Bacoor
Lido Beach Resort
Villamar Beach Resort
San Isidro Beach Resort
Celebrity Beach Resort
Garden Coast Beach Resort
Coasta Eugenia Beach Resort
Villa Criselda Beach Resort



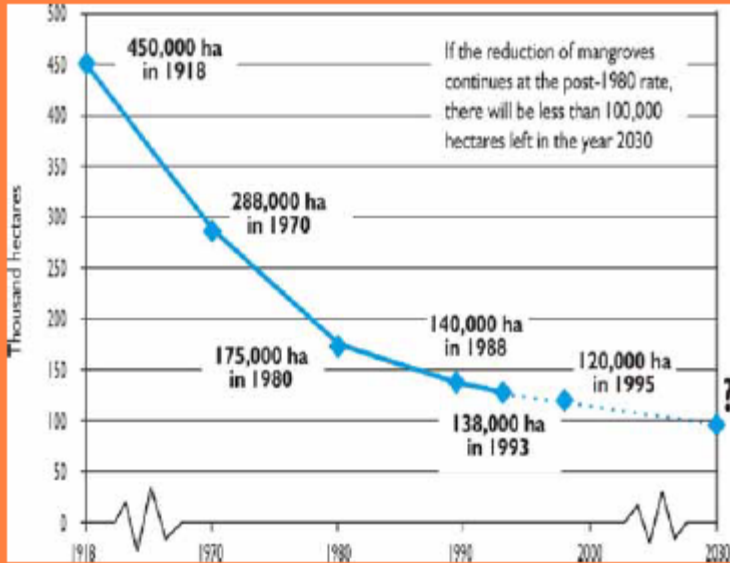
WESTERN

Bathing Beach



MANGROVE

Figure 2.5 Mangrove Resource Decline in the Philippines.

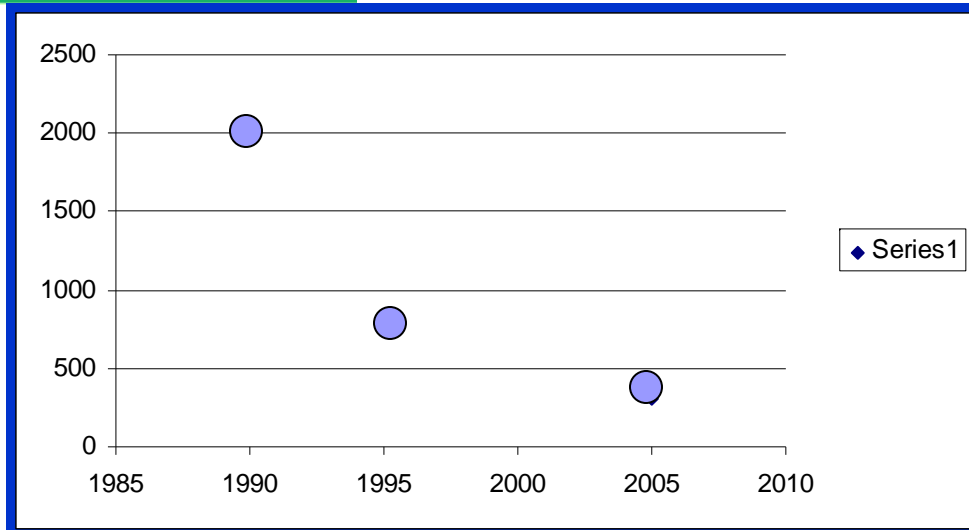


Sources: Brown & Fischer 1918; DENR 1988, 1998; White and de Leon 2004.

MANGROVES OF THE NATIONAL CAPITAL REGION (Navotas, Las Piñas and Parañaque)



Source: IEMP Pilot Study Report



IEMP Importance



Partnership



- class SB sea water classification under DAO 90-34 to make them fit for swimming, skin diving and other form of contact recreation



Lesson Learned, Challenges and Future Directions

- A close cooperation of all related disciplines was able to fulfill the requirements of the pilot study conducted for IEMP
- Inter-agency efforts can be harnessed towards a common goal
 - ✓ provided that the goals are clear
 - ✓ resources and discipline specific support are available.
- The IEMP can provide a basis for private-public partnership strategies and compliance with regulations and other legal matters
- The IEMP has also emphasized the need for
 - ✓ a constant review of activities and
 - ✓ an organized format for communicating the results of the activities.
- Limitation in Resources hampers the sustainability of the IEMP activities:
 - ✓ TBT, pesticides, toxic elements
 - ✓ resource and habitat monitoring
 - ✓ Data Comparability and availability-QAQC
- Expansion to include river monitoring

THANK YOU!