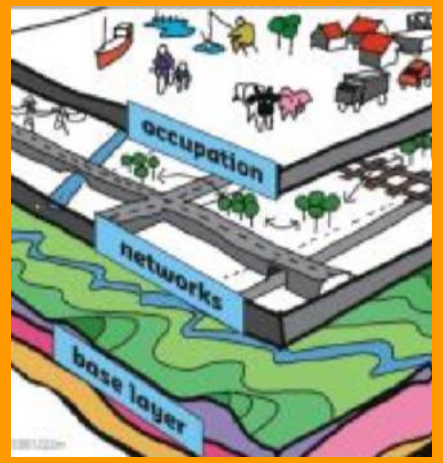
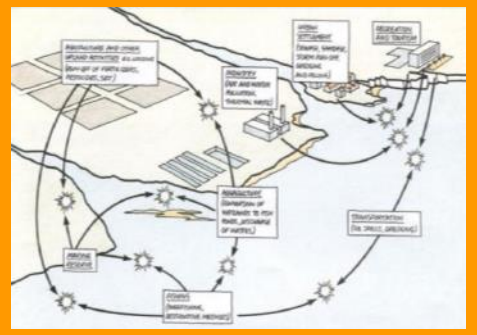
MBSDMP – Background and Overview



Manila Bay Sustainable Development Master Plan (MBSDMP)



November 21 2018, LCP Board Meeting Cebu

VNG International

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and

Joint Venture of:

OIDCI

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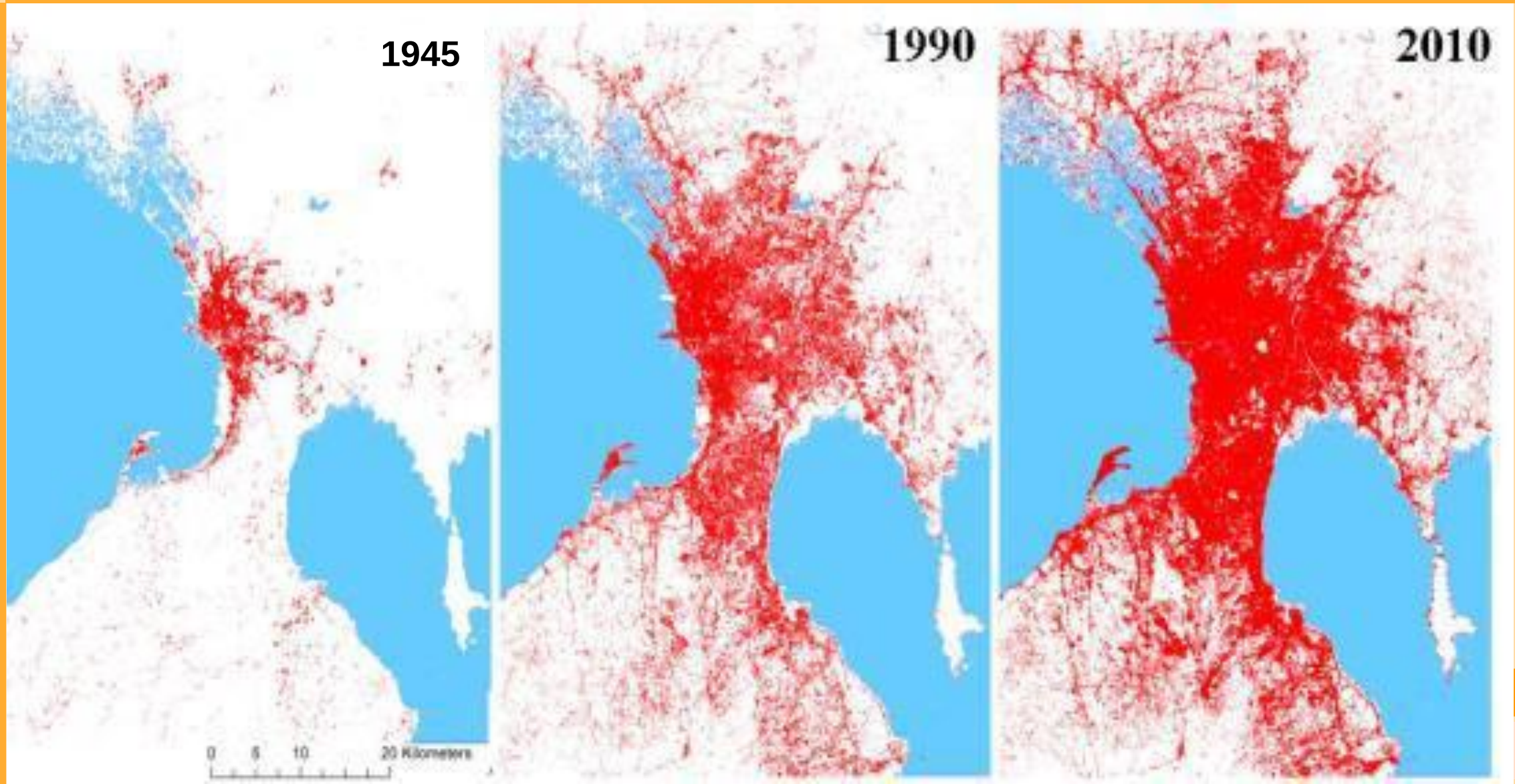
UPLBFI University of the Philippines Los Baños Foundation Incorporated

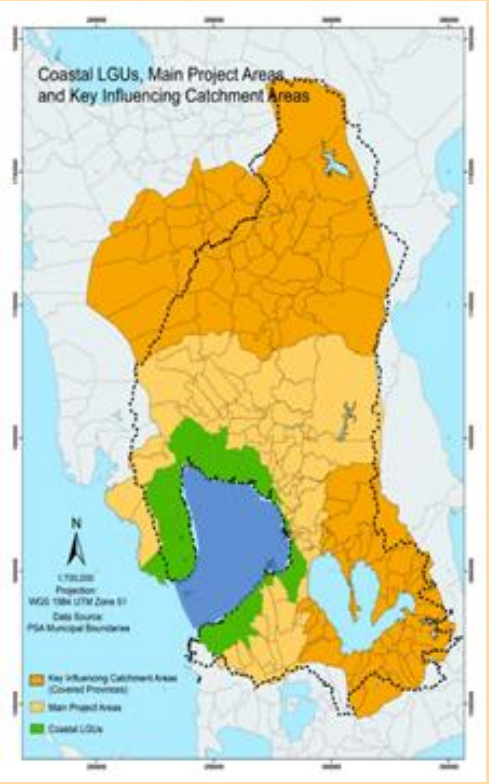
Manila is changing…



Master Planning Framework

The MBSDMP approach aims to make use of solicited private sector investments to achieve strategic management and development goals for:

- **inclusive growth,**
- **ecosystem protection,**
- **climate change adaptation**
- **disaster risk reduction,**
- **water quality improvement and**
- **upgrading informal settlements.**

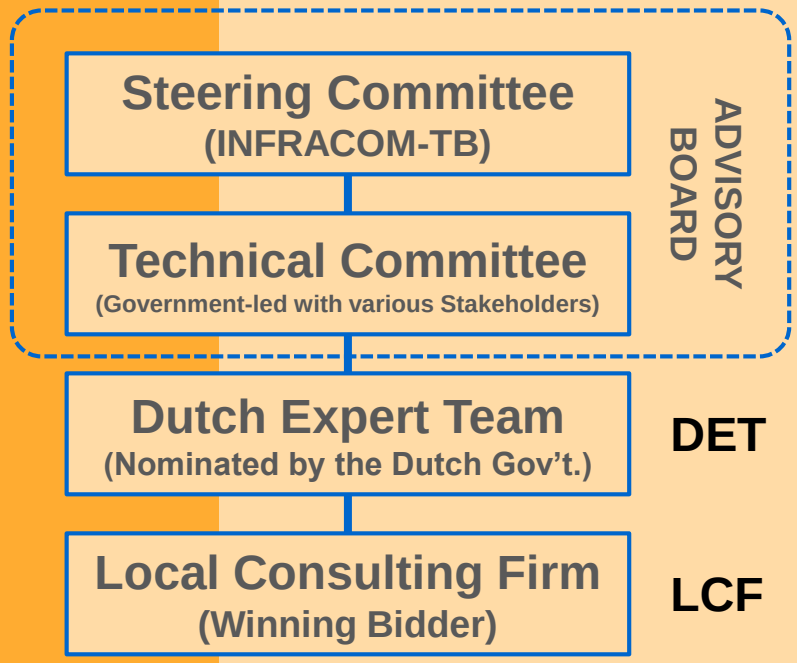


REPUBLIC OF THE PHILIPPINES
NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY

Search ...

SPEECH OF SECRETARY PERNIA DURING THE MOU SIGNING BETWEEN THE PHILIPPINES AND THE KINGDOM OF NETHERLANDS ON MANILA BAY DEVELOPMENT

Project Management Structure

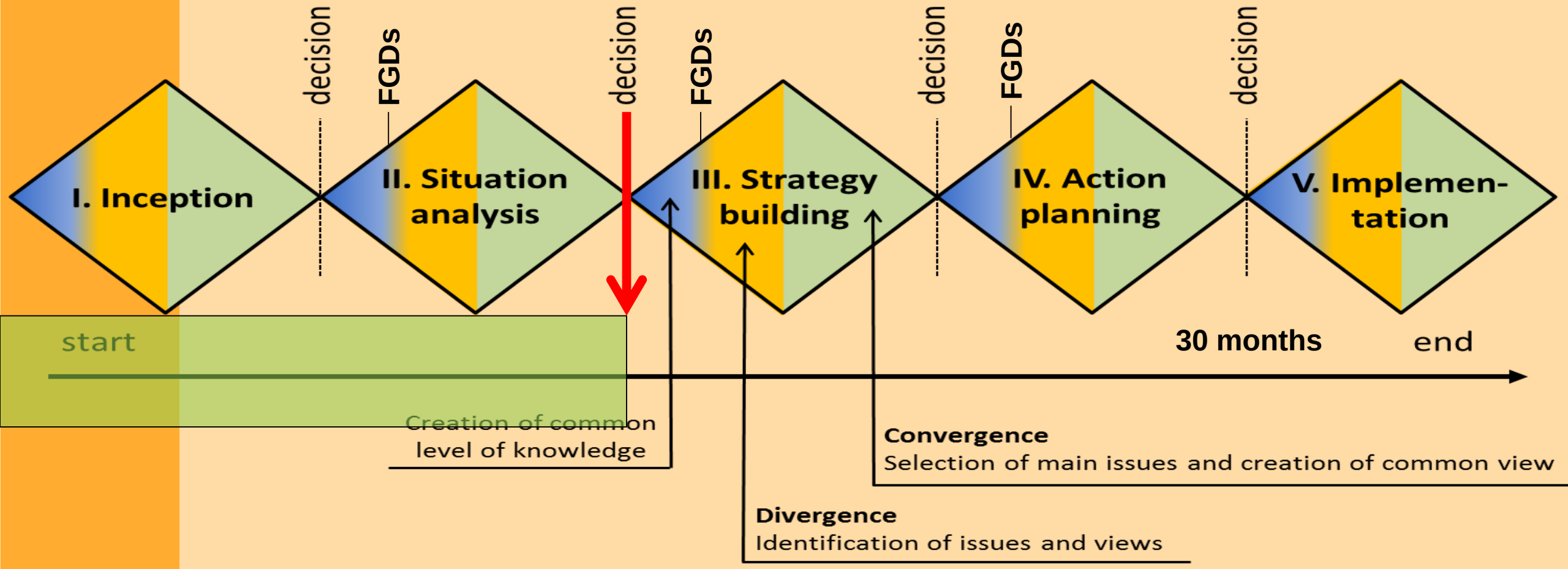


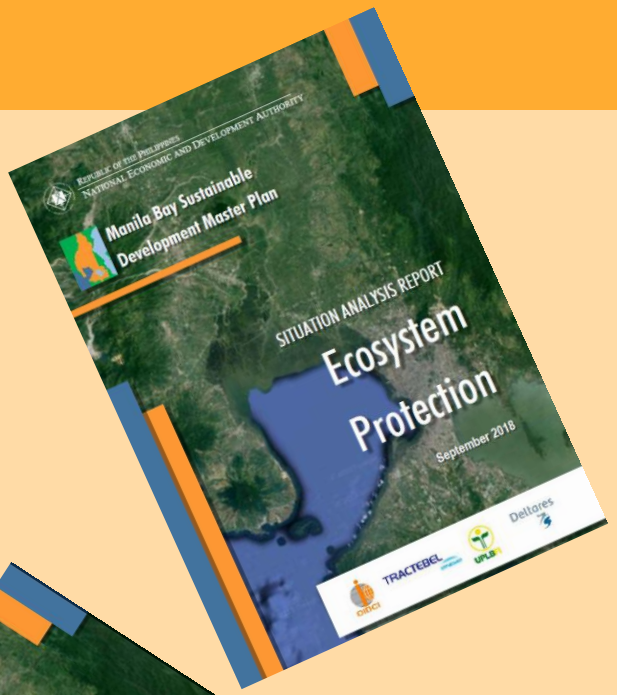
Project Management Structure for the Formulation of the MBSDMP

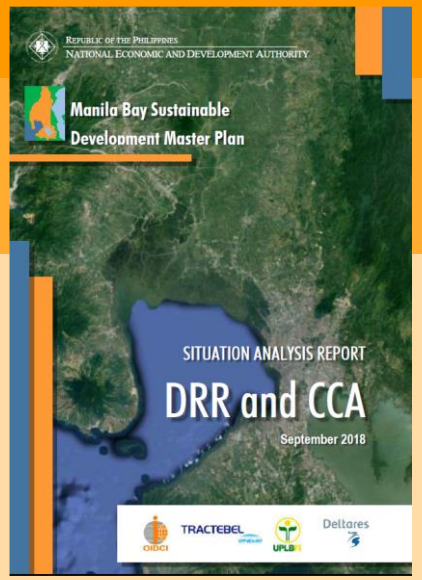
- **Client: NEDA** National Economic and Development Agency
- **Advisory Board** will review the outputs of the DET and the LCF.
- The **Steering Committee**, comprised of the members of the NEDA Board Committee on Infrastructure – Technical Board (INFRACOM-TB) and supported by the INFRACOM Secretariat, shall provide guidance to the DET and the LCF as necessary
- **Technical Committee** is composed of various stakeholders (including representatives from NGAs such as the mandamus agencies; LGUs; representatives from the affected Bay areas as well as representatives from the Dutch Government) - tasked to review activities for the undertaking and endorse as needed, inputs from the DET and/or LCF to the Steering Committee for approval.
- The members are (high-level) representatives (champions) of their organizations and should also actively coordinate together to include and align their sectoral plans with MBSDMP.

Philippine IWRM planning guidelines

Participatory and informed planning and decision making process




Republic of the Philippines
National Economic and Development Authority
Manila Bay Sustainable
Development Master Plan
SITUATION ANALYSIS REPORT
Ecosystem
Protection
September 2018
TRACTEBEL
Deltares


Republic of the Philippines
National Economic and Development Authority
Manila Bay Sustainable
Development Master Plan
SITUATION ANALYSIS REPORT
DRR and CCA
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Republic of the Philippines
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Manila Bay Sustainable
Development Master Plan
SITUATION ANALYSIS REPORT
Water Quality
Improvement
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Republic of the Philippines
National Economic and Development Authority
Manila Bay Sustainable
Development Master Plan
SITUATION ANALYSIS REPORT
Inclusive Growth
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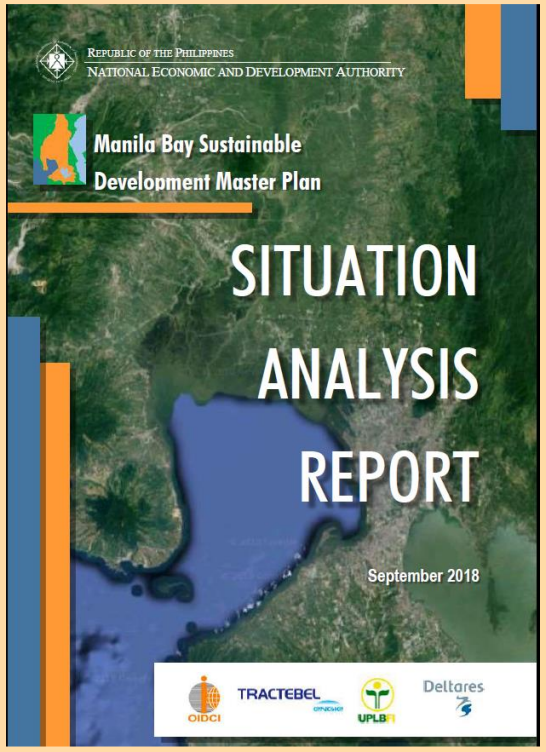
Republic of the Philippines
National Economic and Development Authority
Manila Bay Sustainable
Development Master Plan
SITUATION
ANALYSIS
REPORT
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Republic of the Philippines
National Economic and Development Authority
Manila Bay Sustainable
Development Master Plan
SITUATION ANALYSIS REPORT
Informal
Settlements
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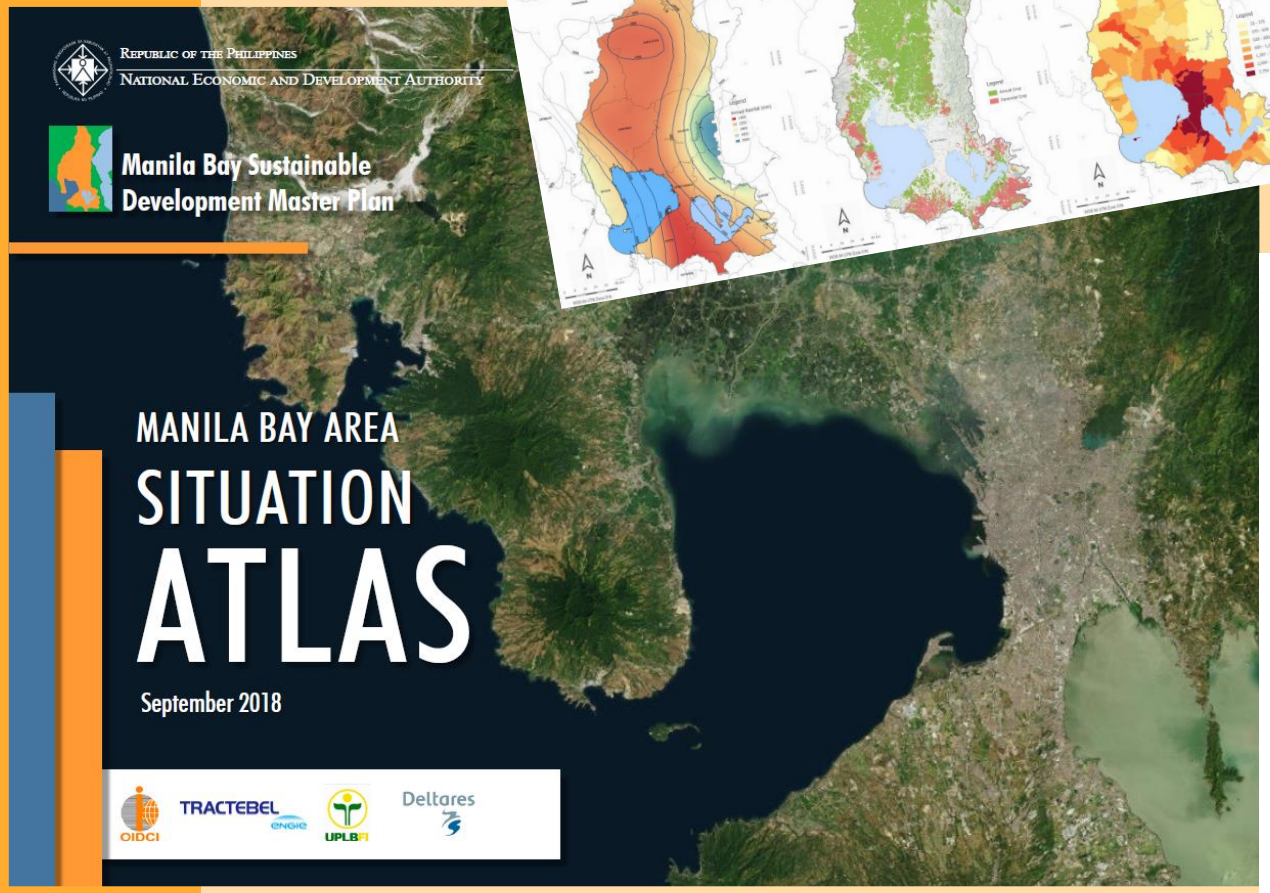
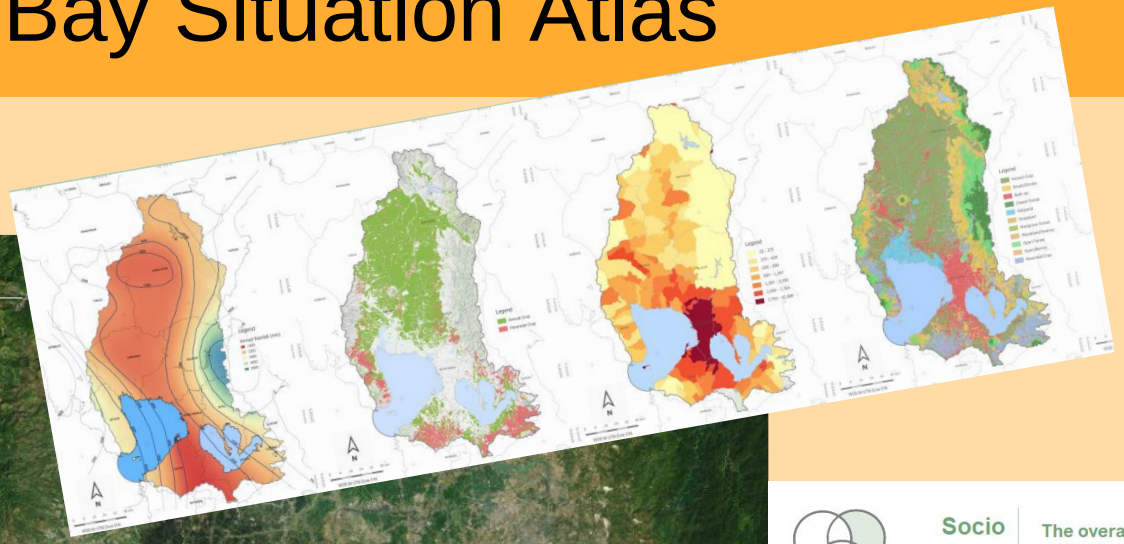
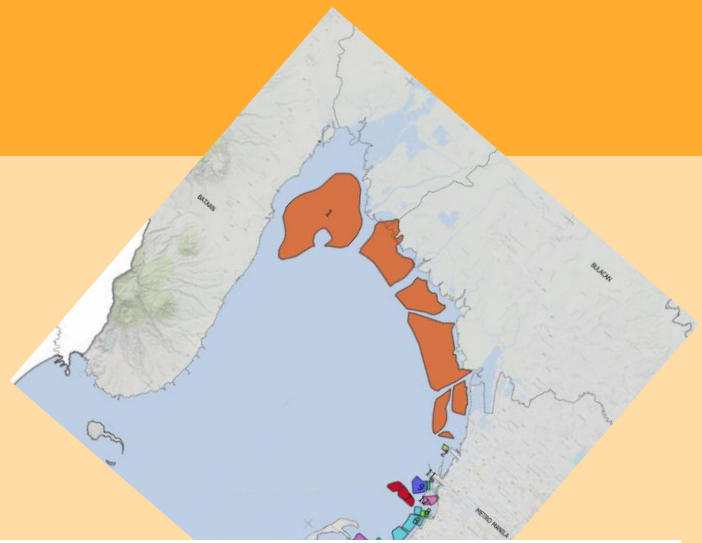
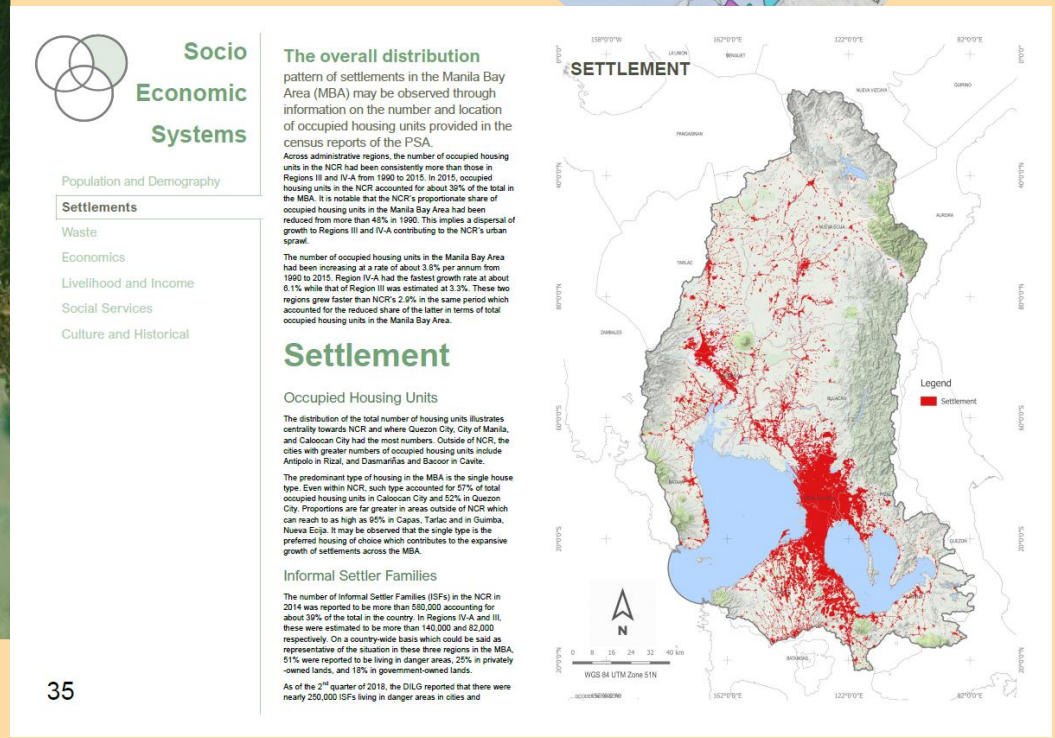
Manila Bay Situation Atlas



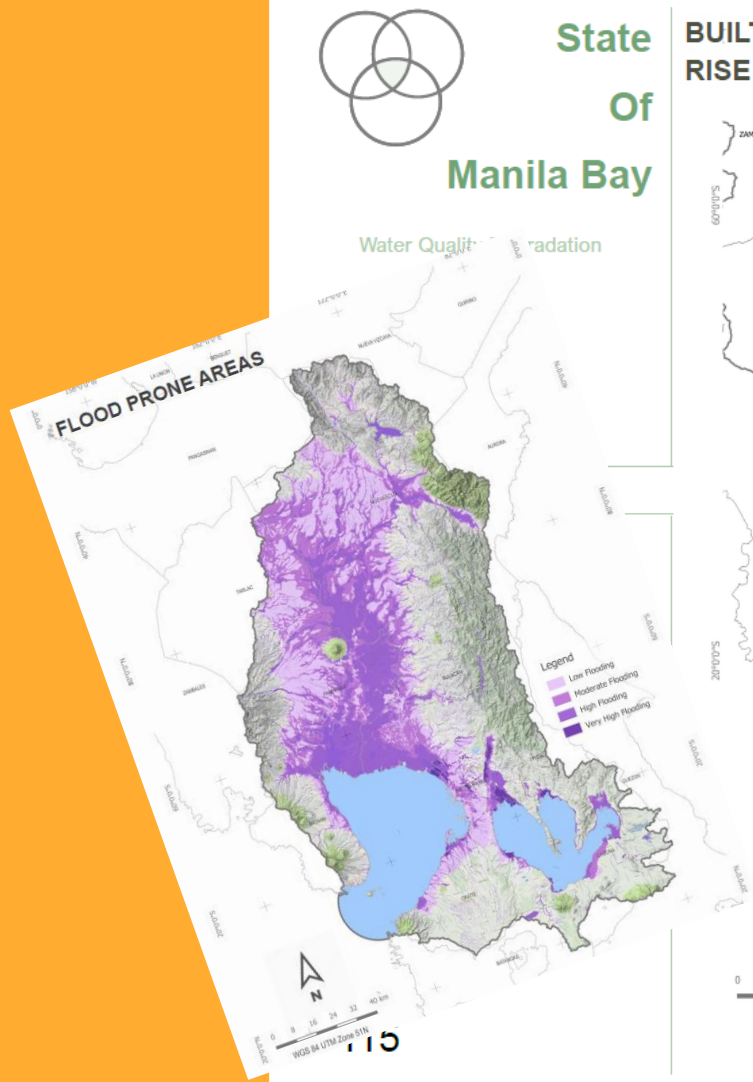


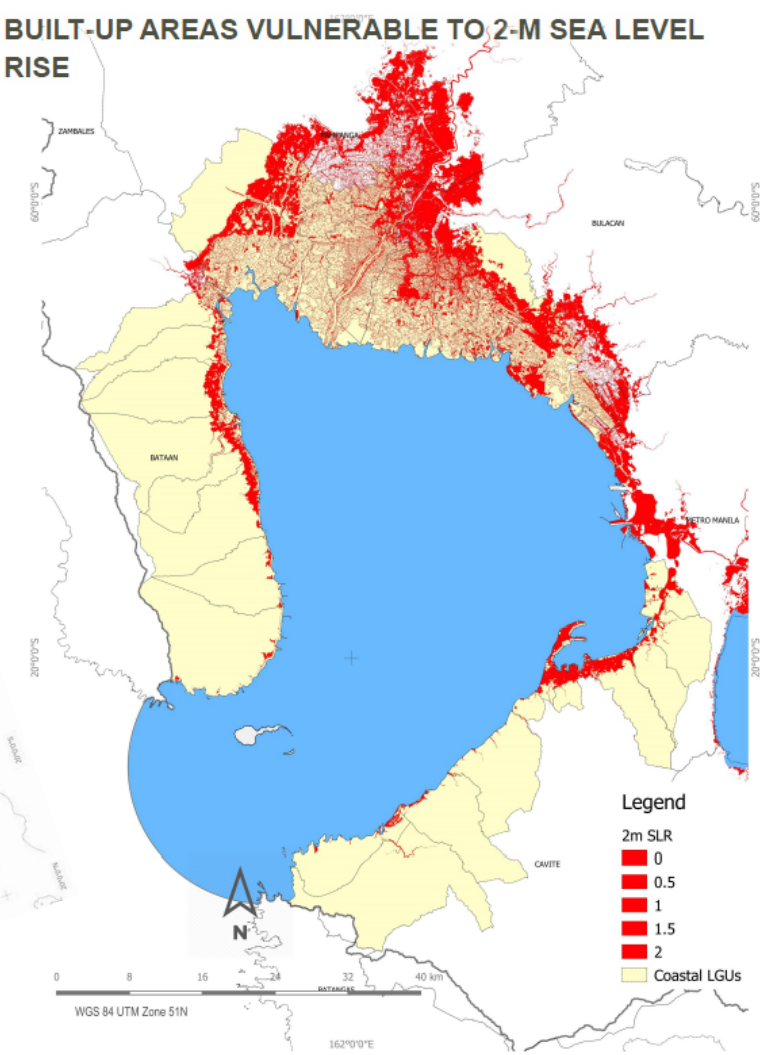




Manila Bay Situation Analysis

Manila Bay Area – a vulnerable place





Saltwater Intrusion

Saltwater intrusion in Manila Bay is caused mainly by groundwater withdrawal. Saline water has moved considerably inland especially along the coasts of Cavite, Metro Manila, Bulacan and Pampanga as shown in the Saltwater Intrusion Mapand is associated with the proliferation of wells that are used to extract groundwater for irrigation purposes. In the future saltwater intrusion is likely to mover further inland if current rate of groundwater withdrawal continues and if sea level rise increases due to projected warming of temperature.

Earthquake

The Manila Bay Area like most other regions in the country is exposed to earthquakes that cause ground shaking, tsunami, and liquefaction damages to residential and business structures, roads and other infrastructures, and cause injuries and fatalities among the vulnerable people. Earthquake modeling for Metro Manila projects substantial risks to the region particularly from the Marikina Valley Fault System and the West Valley Fault. Modeled earthquake scenario with a Magnitude 7.2 intensity event is projected to result to over 37,000 fatalities, and 605,000 injuries with total cost of damages of up to 2.5 trillion pesos (Bautista et al., Undated) and a Magnitude 6.5 event.

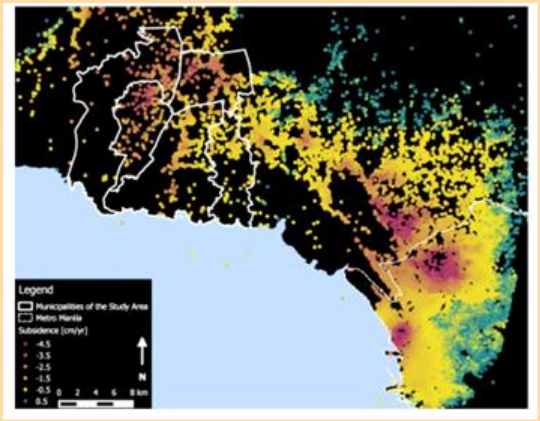
Tsunami

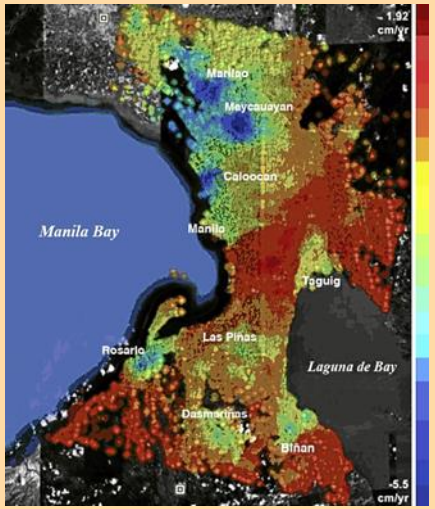
Based on historical records earthquake induced-tsunami is likely to happen in Manila Bay. In 1828 and 1863 2-m high tsunamis hit the western coastline of the country including Metro Manila. Coastal LGUs of Cavite, Metro Manila, Bulacan and Pampanga is likely to be affected by tsunami as shown in the Built-up Areas Vulnerable to Tsunami Map.Hardest hit LGUs likely include Novelata and Kawit in Cavite; Las Pinas, Malabon and Navotas in Metro Manila; Obando, Bulacan, Malolos, Hagonoy, and Paombong in Bulacan; and portion of Masantol Pampanga.

Ground Shaking

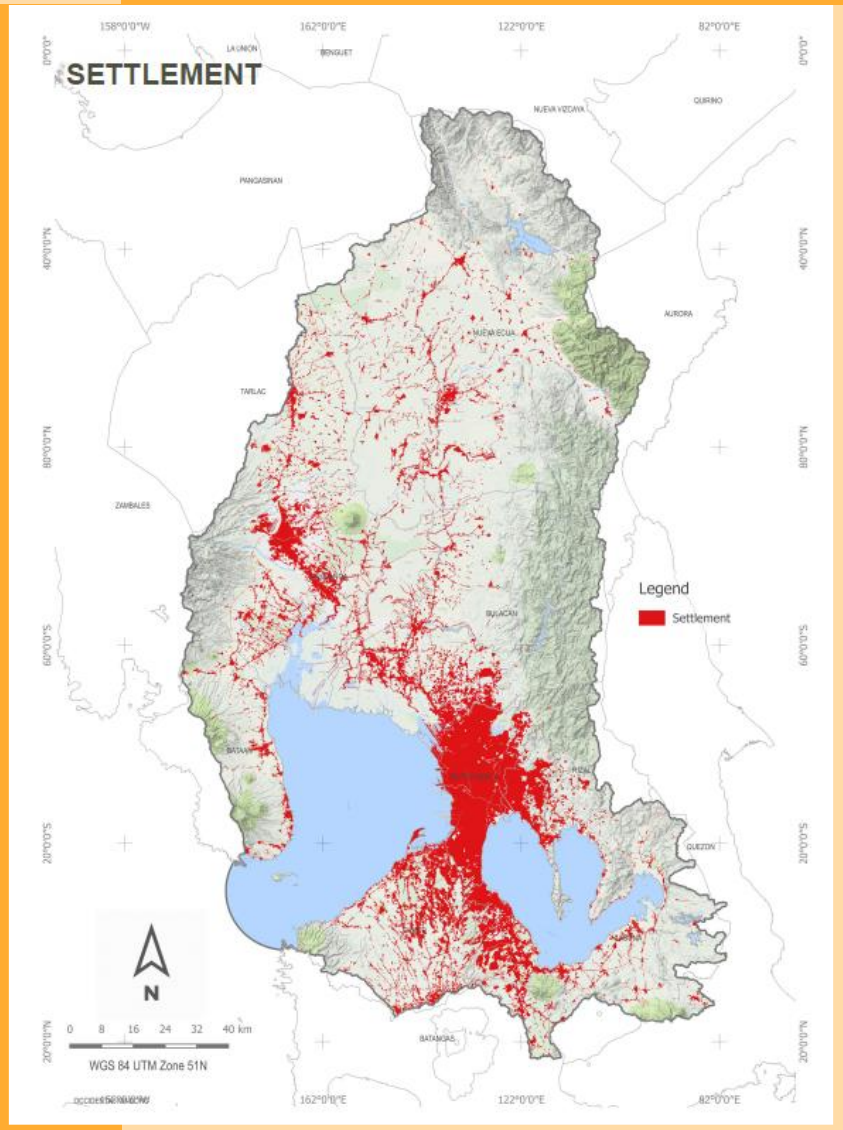
Coastal towns and cities in Metro Manila, Bulacan and Cavite along with inland LGUs in Rizal and Bulacan are most exposed to Magnitude 6.5 and 7.2 earthquake generated along the West Valley Fault. As shown in Map 8, the number of life threatening injuries is projected to be low along the coastal areas of Manila Bay compared to the higher projections in LGUs within the northeastern region of the MBA.

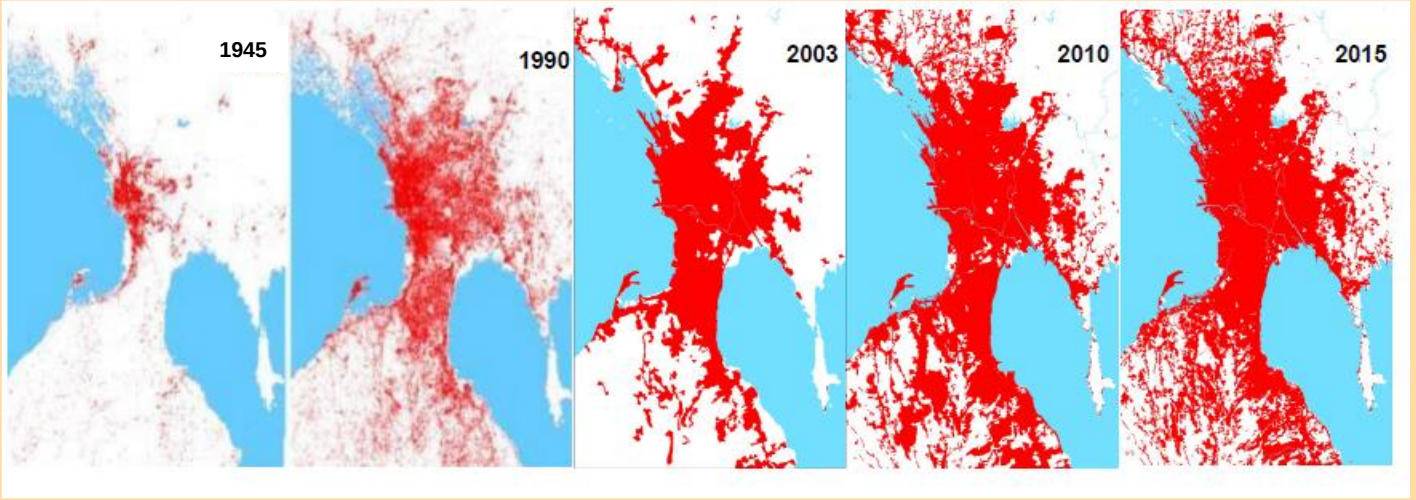
sinking

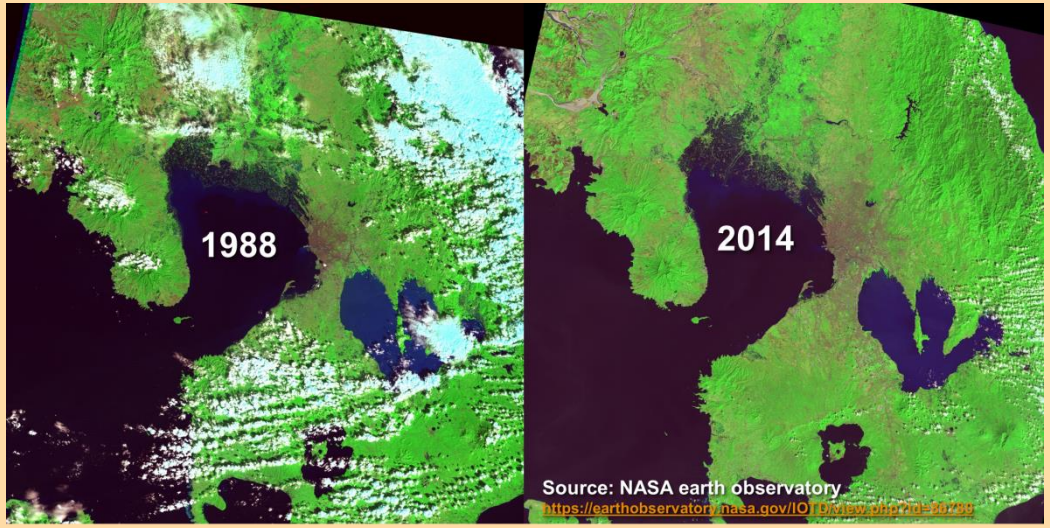




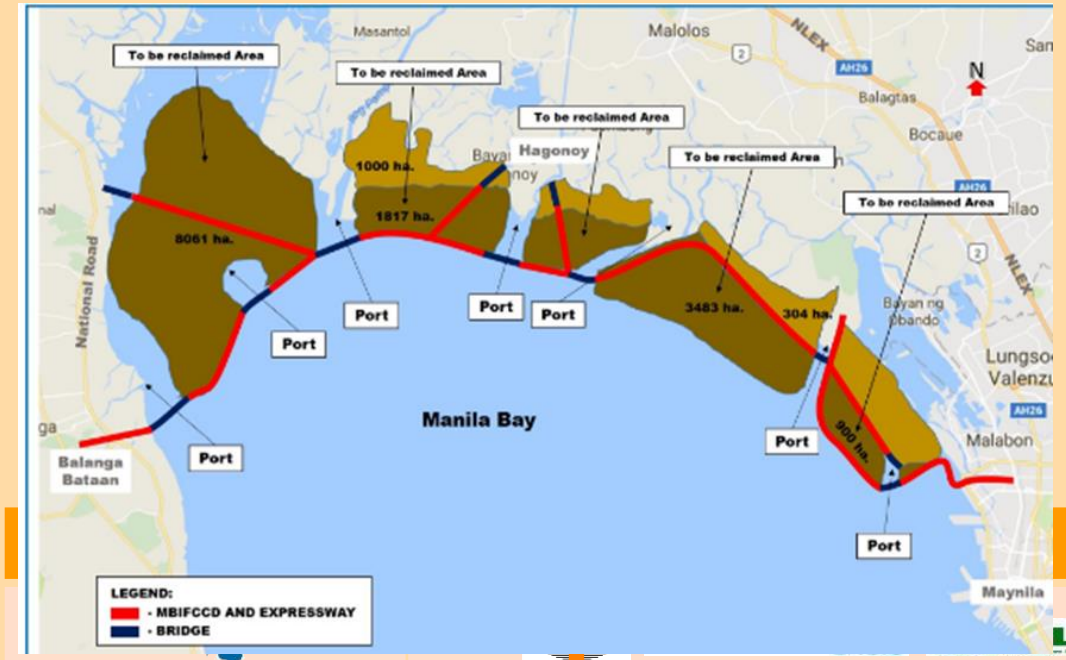
Activities and people everywhere…and changing…



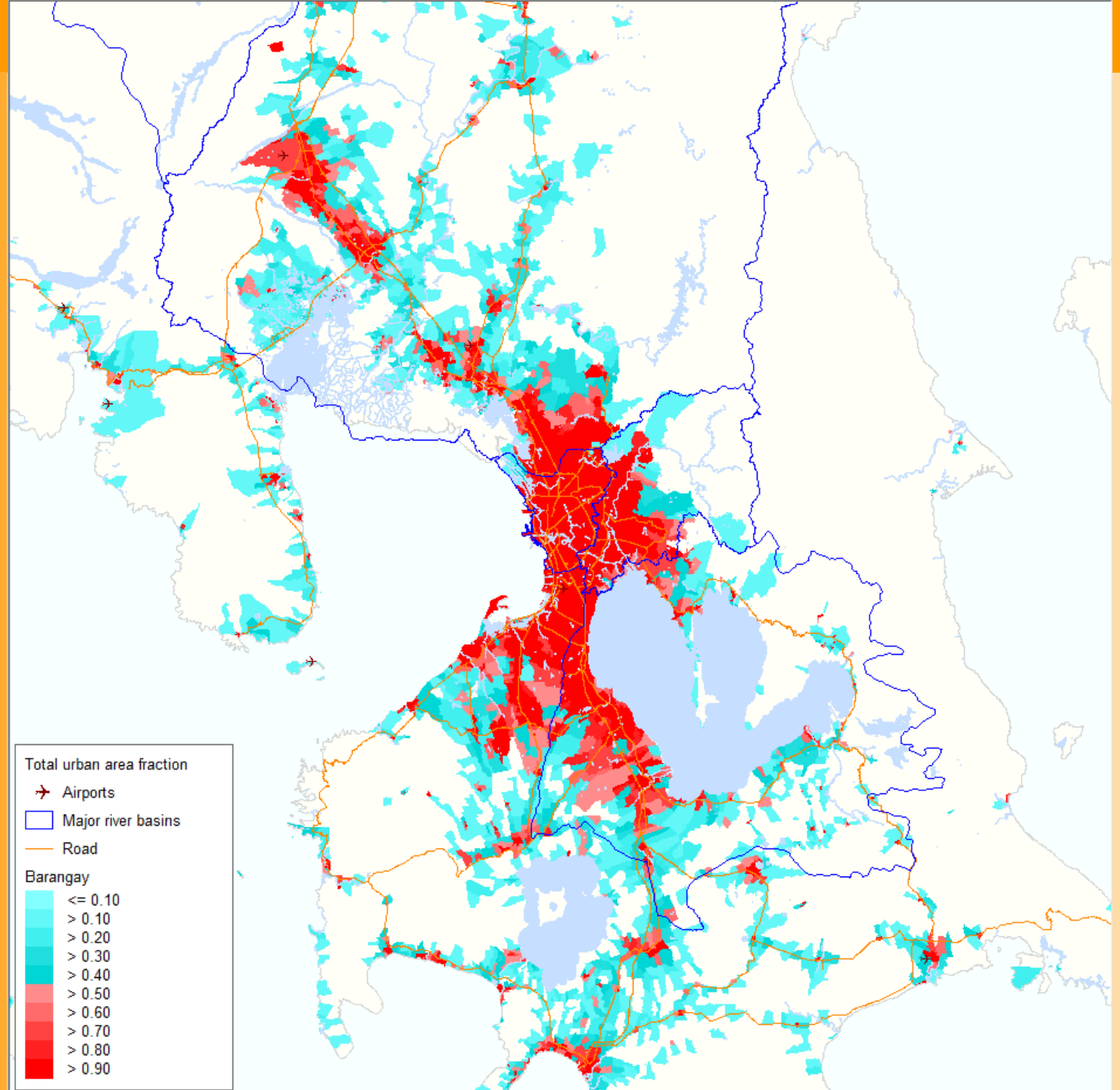




Huge stakeholder interest



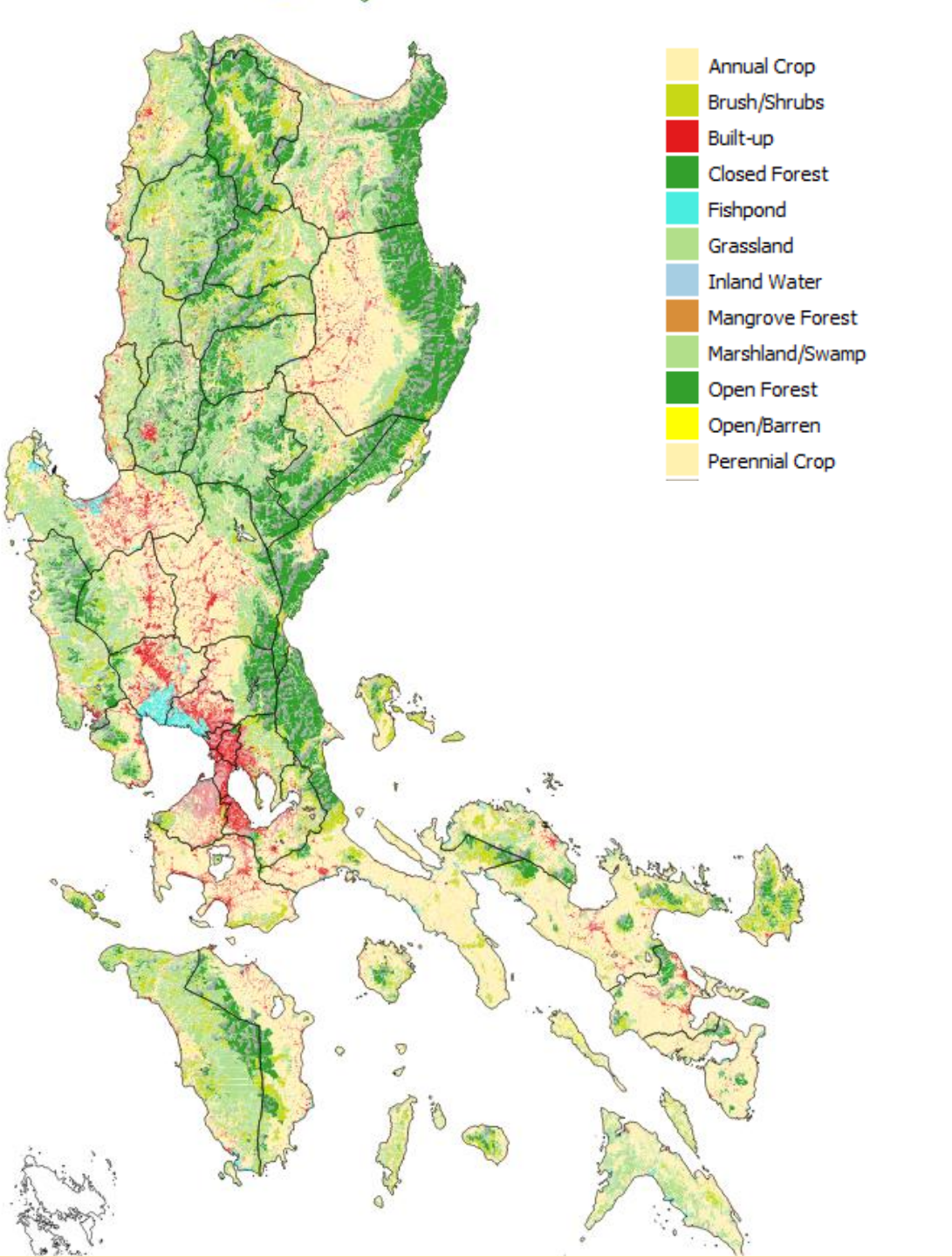
The urban area
will double
in 30 years
2015 - 2045



2015-2045 MB catchment Doubling of the urban area

- Top Priority
  - Manage the New Cities
  - Strict building codes
    - Solid waste, sewer, piped water
  - Avoid doubling the problem

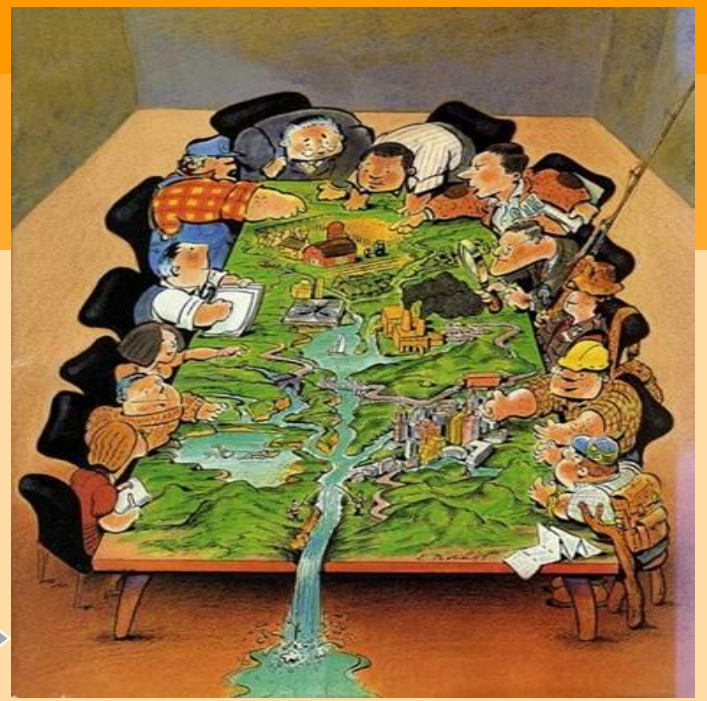
- Fix the “current problems”
  - Solid waste
  - Waste water
  - Scale-up the management
  - Municipality associations



Stakeholder engagement

- Involve and empower
- Create ownership
- Achieve sustainability

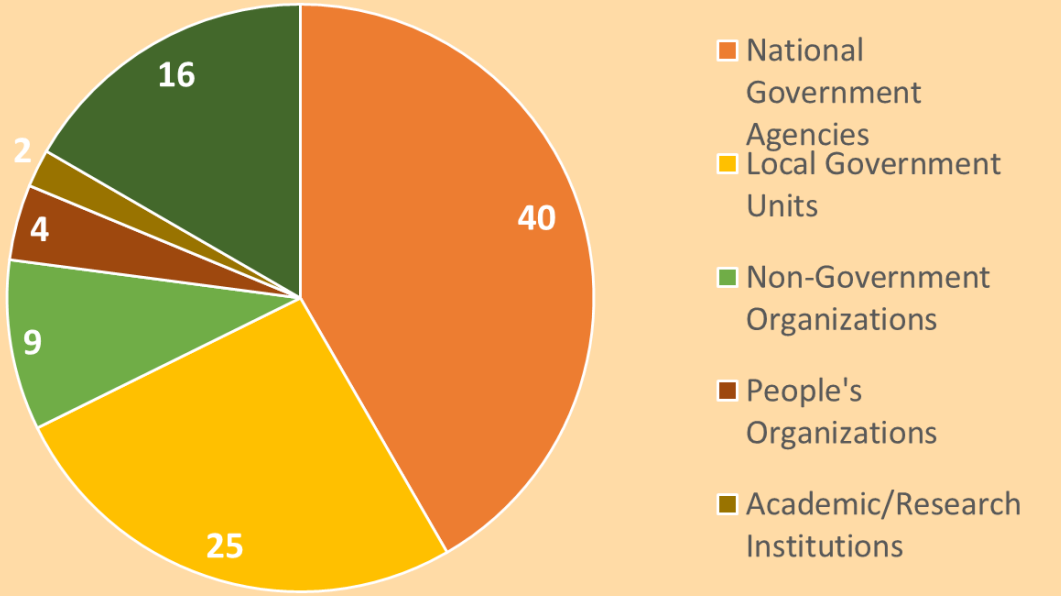
a basis for the Master plan and SEA



Identify stakeholders → Determine participatory methods → Develop Activity/Discussion Guides → Send out invitations → Confirm attendance → Conduct the activity → Integration in Situation Analysis

Number of Stakeholders engaged by category:

- National Government Agencies: 40
- Local Government Units: 25
- Non-Government Organizations: 9
- People's Organizations: 4
- Academic/Research Institutions: 2
- Private Sector: 16



League of Cities / VNG: expected results

- Local governments are recognized as key players. LCP important player.
- Inter-municipal cooperation is effective for voicing interests and/or the execution of projects aimed at the construction of infrastructure and actions aimed at preserving the natural conditions of Manila Bay
- Vertical cooperation required between municipalities, cities, provinces, regions and national government
- NEDA consultation sessions (next February 2019)
  - LCP/VNG Preparation sessions: coming January 2019

Thank you for your attention