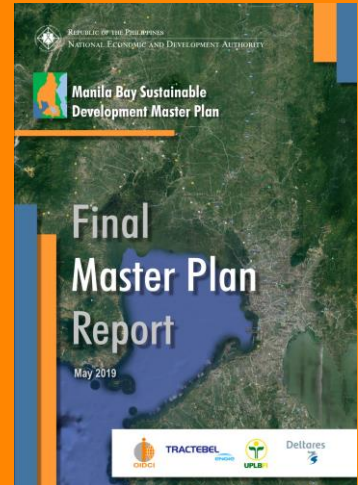




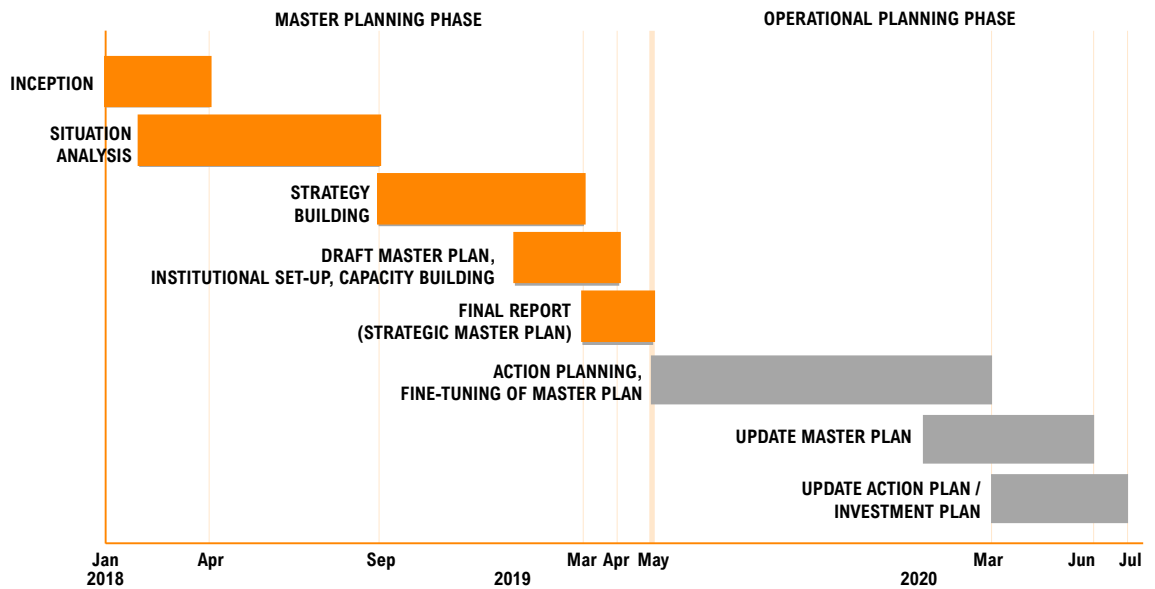
Manila Bay Sustainable Development Master Plan

Draft Master Plan Report



MBSDMP Status

wherearewew?



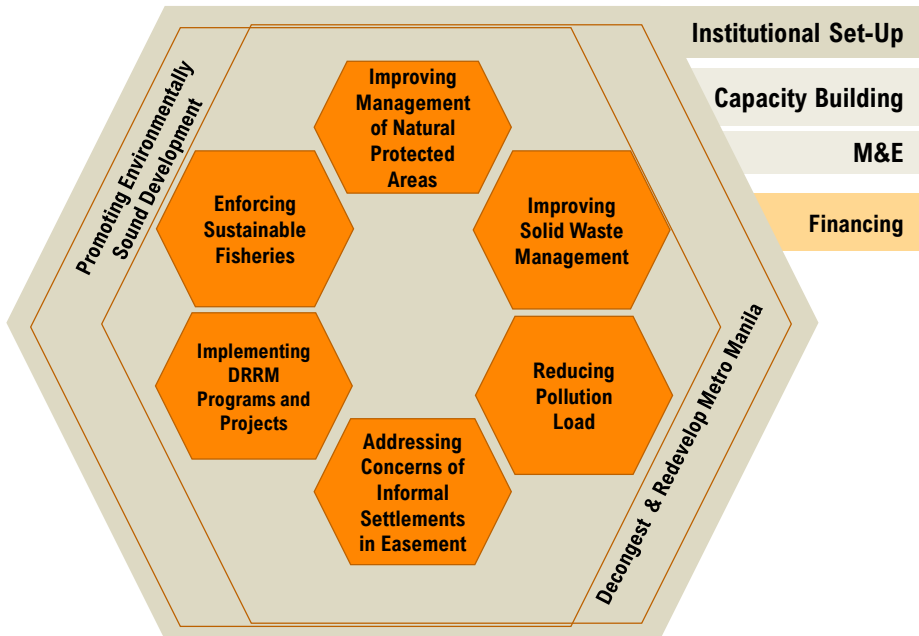
where are we now?

Manila Bay Area (snapshot)



what do we plant to do?

Strategic Master Plan



An equitable improvement in the quality of life in the Manila Bay area.

*It is envisioned that by 2030 the **average poverty incidence in the plan area is reduced to 1.5%** and by 2040 “Filipinos live in a prosperous, predominantly middle-class society where no one is poor”—consistent with the Ambisyon Natin 2040.*



An improved and sustainable Manila Bay water quality suitable for its intended beneficial use.

** It is envisioned that by 2022, **solid waste diversion rate within the MB area is at 80%**—consistent to the PDP 2017-2022, and that **all open dumpsites** within the Manila Bay area are **immediately and permanently closed**.*

** By 2040, it is envisioned that **pollution load of BOD and P04** entering Manila Bay is **reduced significantly (i.e., 75%** of 2015 data recorded) and that Manila Bay is meeting the SB guideline values (i.e., for fecal coliform).*



whatdowewant?

A protection of Manila Bay ecosystem that sustainably delivers variety of services.

*It is envisioned that by 2040 **the area of protected natural habitat** (i.e., (intertidal mudflat, mangrove, coral) is **doubled** and the **fish stock biomass is increased** by three folds and approximates the 1973 standing of biomass.*



whatdowewant?

Safe, resilient, and adaptive Manila Bay ecosystems and communities.

*It is envisioned that by 2030 the number of **people exposed to floods is reduced by at least 51%**—consistent to the **Global Target B of Sendai Framework** of “**substantially reducing the number of people directly affected by disasters**”.*



whatdowewant?

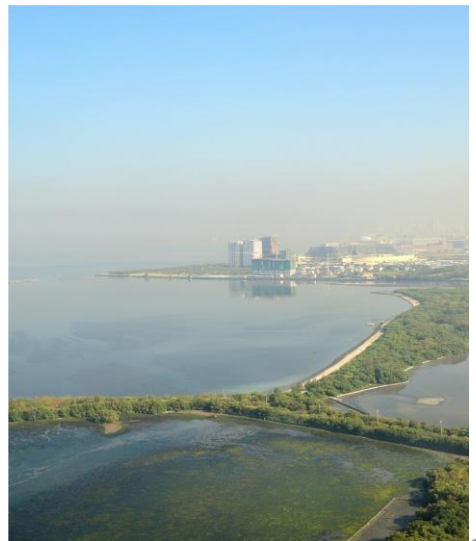
Manila Bay communities with access to safe, affordable and formal housing with access to basic services and economic opportunities.

The key indicator of improving informal settlement with the access to safe, affordable, and formal housing with access to basic services and economic opportunities is ultimately making the legal easement—a hazard-prone area—free from any settlement. It is then envisioned that ISFs in hazard-prone areas are a thing of the past and waterways and esteros are free of obstruction.

A sustainable and resilient Manila Bay

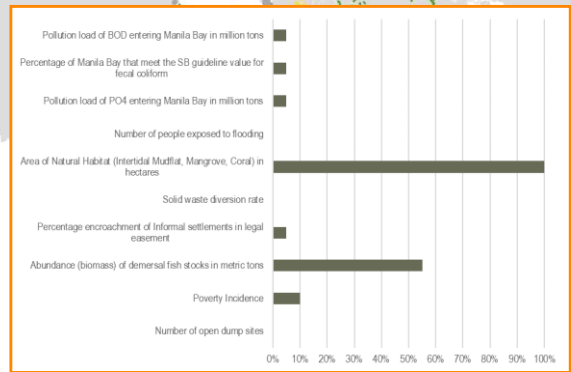
whatdowewant?

Ultimately, it is envisioned that in the near future Manila Bay is clean, rehabilitated, and preserved, and that its waters is restored and maintained— making them fit for swimming, skin-diving, and other forms of contact recreation.



1 Improving Management of Protected Areas

- **Strengthen protection of the remaining habitats in Manila Bay**
 - **Conduct a biodiversity and ecological assessment of Manila Bay**
 - **Develop a harmonized habitat conservation strategy for Manila Bay**
- **Increase coverage of critical habitats through restoration and protection of intertidal areas and DRR zones**
 - **Implement DRR critical habitat restoration and monitoring projects**
 - **Provide strict and consistent protection to actively restored habitats**

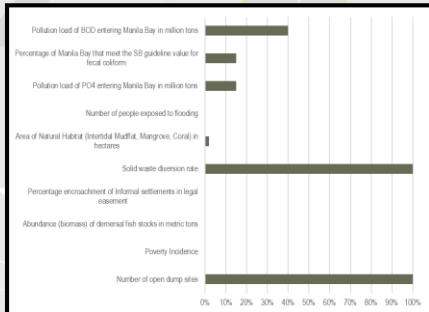


2 Improving Solid Waste Management



- **Stricter enforcement – barangay & LGU level (ex. no waste segregation, no collection + penalty)**
- **Close all open dumpsites**
- **Increase capacities of sanitary landfill (i.e. new SLFs & increase capacities of existing SLFs)**
- **Construction of Regional Transfer Stations and more Materials Recovery Facilities (MRF) to serve all barangays**
- **Construction of large-scale composting facilities & more community-based composting**
- **Implement waste-to-energy projects (i.e., refuse derived fuel (RDF), bio-digesters, thermal/non-thermal technology)**

Improving Solid Waste Management



PET Recycling

- Open Dumpsite
- Sanitary Land Fill
- Manila Bay Area

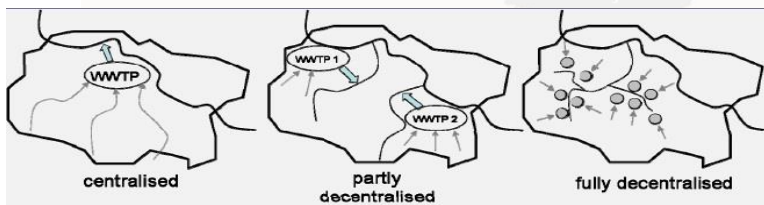
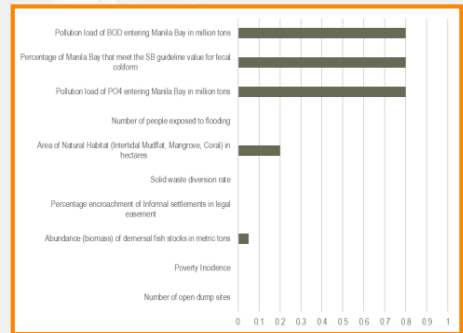


Composite Boards

- Soft measures such as:
 - massive IEC focusing on waste reduction
 - incentives for LGUs to increase diversion rates
 - policy banning single-use disposable plastics
 - policy on Extended Producers Responsibility
 - incentive for recycling industries and composting
 - institutional capacity building esp at the LGU level

Reducing Pollution Load

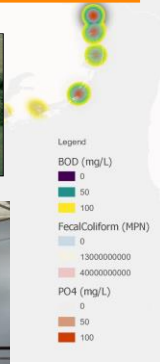
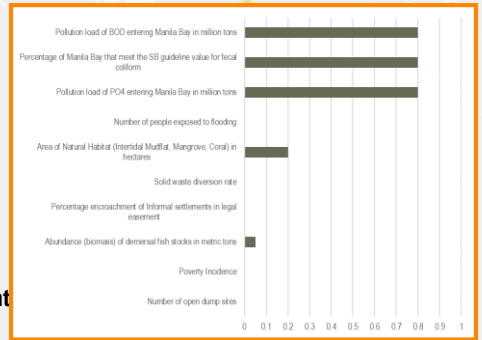
- Expansion of sewerage coverage for management of domestic wastewater
 - Full coverage of Metro Manila 2026
 - 75% coverage of Coastal LGUs and Key Cities by 2040
 - All existing WWTRPs and STPs are all compliant
 - All structures directly discharging untreated effluents to water bodies are removed



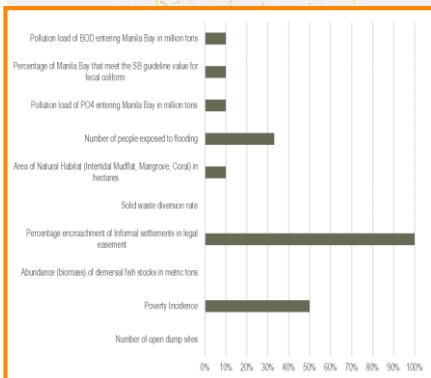
- BOD (mg/L)
- FecalColiform (MPN)
- PO4 (mg/L)

3 Reducing Pollution Load

- **Septage Management - Full coverage of clustered LGUs by 2030 (Ordinance requiring desludging for all HH)**
- **Treatment of effluents from all point sources (commercial, industrial and institutional)**
- **Control of off-shore pollution sources**
- **Decision Support System (DSS) for Water Quality Management of Manila Bay**
- **Implementing soft measures: IEC, capacity devt of the various stakeholders & policy reforms.**



4 Addressing Concerns of Informal Settlements in Easement



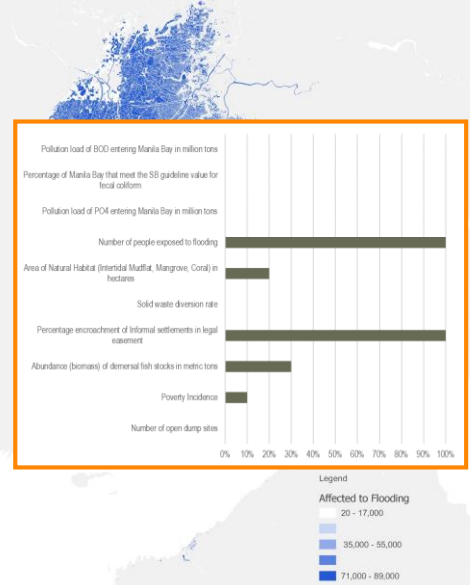
Legend
ISF within 10m Easements



- **Policy reform to strictly require that the developers develop the required 20% for socialized housing within the locality where they are developing, not elsewhere.**
- **Increase the supply of affordable housing (for ISF assignment)**
- **Reducing the motivation for people to live in informal settlements**
 - **Strict implementation of the Writ of Continuing Mandamus**
 - **Strictly enforce easements in clearly demarcated zones in coastal and riparian areas**
 - **Adapt NISU Strategy 13 "Capability-building for appropriate data collection, mapping, knowledge management, and monitoring systems of informal settlements (IS)"**
 - **Adapt NISU Strategy 14 "Capability-building of people's organizations, community-based organizations, and homeowners' associations to engage more on ISF housing (IS)"**
- **Policy reform and improvement of enforcement of related laws and regulations on land development, construction of buildings and infrastructure.**

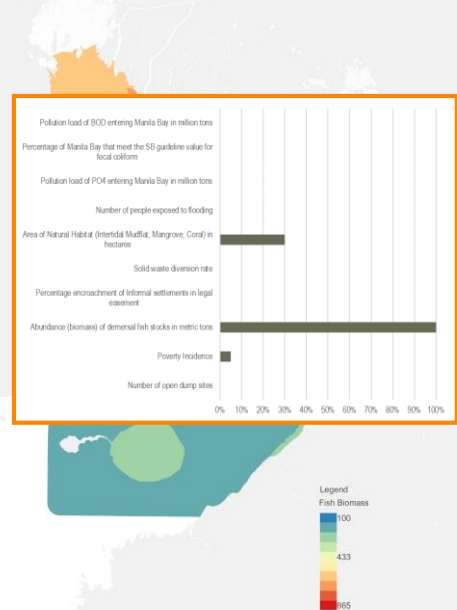
5 Implementing DRRM Programs and Projects

- **Stop Land Subsidence**
 - Development of alternative sources of water
 - Harvesting, storage and use of rainfall, runoff, treated wastewater
 - Provide incentives for use of alternative sources of water
 - Issuance of a moratorium on groundwater extraction
 - Update of CLUPs integrating DRR and CCA
- **Reduction of people occupying hazard prone areas**
- **Enhance flood protection measures**
- **Enhance disaster preparedness and adaptive capacity**
- **Capacity-Building for Climate and Disaster Risk Assessment Integrated with Environmental Management and Restoration (EMR)**
- **IEC to develop behaviors and mindsets of stakeholders to play its roles in DRR and CCA**



6 Enforcing Sustainable Fisheries

- **Strict and consistent enforcement of fisheries laws**
 - Strengthening fisheries protection through enhanced law enforcement capability
 - Implementing a strategic fisheries monitoring and database and management system
- **Implement fish stock biomass enhancement programs**
 - Rebuilding fish stocks through seasonal fishery closure
 - Development of a harmonized sustainable fisheries zoning plan for Manila Bay
 - Strategic habitat restoration and monitoring program for MB
- **Poverty Alleviation and Fishing Community Development**
 - **Community-based fisheries and Aquaculture development and Management Plan**
 - **Implement alternative livelihood activities and long-term support program for fisherfolks**



7 Promoting Environmentally Sound Development

- **Projects on Safeguarding Food and Water Security**
 - **Establishment of Small Water Impounding Systems**
 - **Extensive rainwater harvesting, storage and use**
 - **Management of run offs and flood waters as water resource**
 - **Capacity Building for Income Diversification for Farmers and Fisherfolks**
 - **Establishment of Soil Conservation Technology**
 - **Demo Farms for Manila Bay Rehabilitation**
 - **Adoption of Agricultural Wastewater Treatment Management and Technology**
- **Enforcing responsible reclamation activities, if there is a need for such.**
 - **Strictly enforce Section 6 of E.O. No. 74 (series of 2019)**
 - **Evolve other policies and standards for responsible land reclamation (and their implementation and enforcement)**
 - **Ensure implementation of R.A. No. 7279 (UDHA) balanced housing policy provision**
 - **Formulate and enforce ordinances to maximize benefits to the host community**
 - **Undertake responsible land reclamation projects**

7 Promoting Environmentally Sound Development

- **Strict enforcement of the EIS System (P.D. No. 1586)**
- **Development of Laws, other policies, standards, regulations**
 - **to regulate agricultural land conversion**
 - **for the new law creating the DHSUD,**
 - **Physical Planning and building laws (and their interpretation, implementation and enforcement), Sustainable rating systems and incentivizing “green” developments**
 - **on Climate Change Adaptation (CCA) and Disaster Preparedness, on Climate Change Mitigation through reduction of Greenhouse Gases**
 - **Adherence to sustainable tourism development principles, promotion of responsible tourism, development of urban green tourism products and capacity building of LGUs on sustainable tourism development and the promotion of responsible tourism**
 - **Passage of National Land Use Act**

8

Decongest & Redevelop Metro Manila

- Passage of the National Land Use Act (NLUA) and related policies
- Establish the carrying capacity of the approximately 96 LGUs framing and draining into the Manila Bay
- Ensure land use efficiency
- **Redevelopment at built-up areas, densification/ infill, land readjustment, etc.**
- **Create sustainable tourism** products, develop beach management guidelines and beach recovery
- New growth centers (NGCs) and reverse migration
- Transfer of Government offices (to Government -owned buildings)
- Affordable Housing Stocks

Institutional Set-up Options

- Strengthen Existing Manila Bay Structures (MB Task Force, MBCO)
- Create a New Authority (similar to SBMA, LLDA)

The current Institutional Arrangement will be utilized for the short-term plans while the long-term MB Institutional Set-up is being decided upon and established.

Financing

- **Indicative Cost of PhP1.097 trillion investment requirements to carry out the 20-year plan (to be validated and detailed during action planning)**
- **Financing Strategies**
 - Phasing of Project Implementation
 - Strengthening the Revenue Generating Capabilities of Local Governments
 - Clustering of Facilities
 - Blended Financing
- **Possible funding and financing sources**
 - Private Investments
 - National Government
 - Local Development Fund
 - Land-based Financing
 - Water districts, international development agencies, and lending institutions

Next steps

- **Comment on Master Plan – June to July 2019**
- **Update/Refinement of Master Plan – October 2019**
- **Action Planning - starting June – September, 2019**
 - **By Measures**
 - **With stakeholders**

A large, irregular orange watercolor splash is centered on a white background. The splash has a textured, painterly appearance with darker orange tones in the center and lighter, more translucent orange towards the edges. The text "Maraming Salamat!" is written in a bold, white, sans-serif font, centered within the splash.

**Maraming
Salamat!**