Technical Committee Meeting:
Final Action Plan + Investment Reports

via Zoom | 25 January 2021
Outline

- Project Timeline and Deliverables
- 4 Pillars of MBSDMP
  - ICZM Planning Framework
  - Priority Measures
  - Enabling Environment
  - Stakeholder Engagement
- Institutional Setup
MBSDMP Status

INCEPTION

SITUATION ANALYSIS

STRATEGY BUILDING

DRAFT MASTER PLAN, INSTITUTIONAL SET-UP, CAPACITY BUILDING

FINAL REPORT (STRATEGIC MASTER PLAN)

ACTION PLANNING, FINE-TUNING OF MASTER PLAN

UPDATE MASTER PLAN

UPDATE ACTION PLAN / INVESTMENT PLAN

OPERATIONAL PLANNING PHASE

MBSDMP Status

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OPERATIONAL PLANNING PHASE

Action Plan/ Investment Report

Submitted Updated Master Plan

Submitted Updated Action Plan/ Investment Report

Dec

Sep

Mar

May

Jul

Sep

Dec

2018

2019

2020

Jan

Apr

Sep

Mar

Apr

May

Mar

May

Jul

Sep
4 Pillars of MBSDMP

- **ICZM Planning Framework**
- **Priority Measures**
  - Reduce Pollution Load
  - Improve Solid Waste Management
  - Reduce Exposure to Flooding
  - Restore Natural Habitats
  - Boost Fish Biomass
  - Promote Responsible and Sustainable Tourism
- **Enabling Environment**
- **Stakeholder Engagement**
ICZM Planning Framework

Key Principles Governing the ICZM Planning Framework

- **Sustainability** – uninterrupted delivery of Manila Bay ecosystem services
- **Precautionary** – adoption of measures or decisions to guard against uncertain hazards to Manila Bay ecosystems and communities
- **Optimization of multiple uses** – optimum balance of ecological and socioeconomic goals in the management and development of Manila Bay and ideally of Manila Bay Region
- **Participatory** – engagement of concerned LGUs, NGAs, private sector and other key stakeholders in making decisions on the use of Manila Bay
- **Multi-disciplinary** - engagement of experts from various disciplines related to the management and development of Manila Bay
ICZM Planning Framework

Major Zones within Manila Bay

1. Strict Protection Zone (SPZ)
   - consisting of natural areas with high biodiversity value. These areas are to be closed to all human activities except for scientific studies and/or ceremonies or non-extractive uses by the indigenous peoples. Habitats of threatened species, or degraded areas that have been designated for restoration and subsequent protection are included in this zone.
   - This zone also includes a buffer zone to minimize the protection of habitats where the majority of spawning fish and invertebrate larvae are predicted to settle.

2. Special Use Zone
   - portions of the Manila Bay with specific functions that are specified and protected by law. Human activities in this zone are also defined and limited by law. These areas include the shipping navigational lanes, ports and harbors, naval bases, restricted areas, and protected areas.

3. Other Production Use Zones
   - includes the Recreation Zone (RZ), Fishery Use Zone (FUZ), Multiple Use Zone (MUZ) which are zones primarily intended for recreation and economic purposes.
ICZM Planning Framework

Planning Considerations

- Land Subsidence
- Storm Surge
- Water Circulation and Coastal Soil Erosion
### ICZM Planning Framework

<table>
<thead>
<tr>
<th>No.</th>
<th>Principle Statement</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>Protect and Restore Existing Ecosystem</td>
<td>Protection and restoration projects in any zones, when necessary, should be implemented.</td>
</tr>
<tr>
<td>No. 2</td>
<td>Protect Habitat of Fishes, Migratory Birds, and Large Marine Mammals</td>
<td>Development activities that will not significantly and permanently affect, reduce and alter mangroves, intertidal mudflats, coral reefs, marine protected areas, fish sanctuary, and marine key biodiversity areas, including shallow water surrounding complex habitats (combination of any mangrove, intertidal mudflats, coral reefs, marine protected areas, fish sanctuary, and/or marine key biodiversity areas) to up to 3 kilometer radius from the complex habitats (buffer zone) may be allowed in these areas after complying with all the requirements in the conduct of full EIA process as required by Law, and with all other studies and requirements as may be imposed by concerned Manila Bay governing body.</td>
</tr>
<tr>
<td>No. 3</td>
<td>Sustain Use of Areas as Defined by Law</td>
<td>Development projects within the Zone 2 are allowed as per its intent and purpose as defined by law.</td>
</tr>
<tr>
<td>No. 4</td>
<td>Maintain Water Circulation and Tidal Movement</td>
<td>Any developments in any zones should not significantly impede or alter water circulation and tidal movement that will have significant impact on the sustainability of Manila Bay’s critical habitat.</td>
</tr>
<tr>
<td>No. 5</td>
<td>Optimize the use of available resources for greater benefits</td>
<td>Any development projects within Zone 3 are allowed. This includes potential change of economic activities in favor of better economic and financial outcomes.</td>
</tr>
</tbody>
</table>
ICZM Planning Framework Implementation

Institutionalization

Communication

Capacity Building

Technical Assistance

Alignment of CLUPs
Alignment of NGA PAPs
Alignment of Proposals
Alignment of M&Es
Others

Concerned Stakeholders

MBTF
Priority Measures

- Reduce pollution load
- Improve solid waste management
- Reduce exposure to flooding
- Restore natural habitats
- Boost fish biomass
- Promote responsible and sustainable tourism
Reduce Pollution Load

**SEWERAGE/SEPTAGE (connected to MWSS cons.)**
Maynilad, Manila Water + [PWSSMP]

**SEWERAGE/SEPTAGE (connected to WD & LGU)**
LWUA, WD, LGU + [PWSSMP]

**ZERO OPEN DEFECATION**
DOH, LGU

**MONITORING & STRICT COMPLIANCE TO CLEAN WATER ACT**
EMB + [PWSSMP]

**MONITORING & STRICT COMPLIANCE TO GENERAL EFFULENT STANDARDS**
EMB + [Clean Water Act]

**IMPROVE OFF-SHORE WASTE MANAGEMENT**
PPA, MARINA, PCG

**PRECISION AGRICULTURE & AQUACULTURE**
DA, LGU, Community
Reduce Pollution Load

- **RPL01** | Expand Coverage for Both Sewerage and Septage Management to Treat Domestic Wastewater
- **RPL02** | Improve Compliance With General Effluent Standards by Businesses, Commercial, Institutions, and Industries
- **RPL03** | Control of Off-Shore Water Pollution Sources
- **RPL04** | Control of Pollution from Urban and Rural Run-Off
- **RPL05** | Increase Public Awareness on Untreated Wastewater and its Negative Effects
- **RPL06** | Establish Manila Bay Water Quality Decision Support System

**ISWM** | Improve Solid Waste Management

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Unit of Measurement</th>
<th>Base Case 2015</th>
<th>Target 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution load of BOD entering Manila Bay</td>
<td>Annual BOD in million tons</td>
<td>0.346</td>
<td>0.087</td>
</tr>
<tr>
<td>Percentage of Manila Bay monitoring stations that meet the Class SB water guideline values for fecal coliform</td>
<td>Percentage of monitoring stations</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Pollution load of PO4 entering Manila Bay</td>
<td>Annual PO4 in million tons</td>
<td>0.030</td>
<td>0.0075</td>
</tr>
<tr>
<td>Action Plan No.</td>
<td>Title</td>
<td>Target</td>
<td>Timeframe</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>RPL01</td>
<td>02-01 P</td>
<td>Various Septage Projects in Manila Bay Coastal LGUs outside of NCR by Water District/LGUs</td>
<td>100% by 2030</td>
</tr>
<tr>
<td>RPL01</td>
<td>02-02 P</td>
<td>Various Septage Projects in Non-Coastal Key Cities outside of NCR by Water Districts /LGUs</td>
<td>100% by 2030</td>
</tr>
<tr>
<td>RPL01</td>
<td>02-03 P</td>
<td>Full Coverage of Septage Management for all LGUs and Clustered LGUs outside of Metro Manila covered by Water Districts/LGUs</td>
<td>100% by 2030</td>
</tr>
<tr>
<td>RPL01</td>
<td>03-04 P</td>
<td>Various Sewerage Projects in Manila Bay Coastal LGUs outside of NCR by NG/DPWH</td>
<td>25% by 2030, 50% by 2040</td>
</tr>
<tr>
<td>RPL01</td>
<td>03-05 P</td>
<td>Various Sewerage Projects in Non-Coastal Key Cities outside of NCR by NG/DPWH</td>
<td>25% by 2030, 50% by 2040</td>
</tr>
</tbody>
</table>
# Industrial and Commercial Sources

## Indicative Cost (in PhP Million)

<table>
<thead>
<tr>
<th>Action Plan No.</th>
<th>Title</th>
<th>Timeframe</th>
<th>Indicative Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPL02</td>
<td>01-02 PP P</td>
<td>Wastewater Treatment of Point Sources for Micro, Small, and Medium Establishments under MBCO-DOST assistance</td>
<td>2023-2030</td>
</tr>
<tr>
<td>RPL02</td>
<td>01-04 P</td>
<td>Development and Deployment of General Effluent Standards Monitoring System</td>
<td>2023-</td>
</tr>
<tr>
<td>RPL02</td>
<td>new</td>
<td>Centralized provincial laboratory (building and equipment) for compliance monitoring</td>
<td>2023-</td>
</tr>
<tr>
<td>RPL03</td>
<td>01-01 P</td>
<td>Establishment of Unified Systems Monitoring and Management of Ship-Generated Wastes by MARINA, PCG, DA-PFDA and PPA</td>
<td>2022-2025</td>
</tr>
<tr>
<td>RPL03</td>
<td>02-01 P</td>
<td>Design and Construction of On-shore Receiving Facilities (for both sewage and solid waste) in PPA Ports in Manila Bay</td>
<td>2023-2026</td>
</tr>
<tr>
<td>RPL04</td>
<td>01-01 P</td>
<td>Precision Agriculture and Aquaculture</td>
<td>2023-2024</td>
</tr>
<tr>
<td>RPL05</td>
<td>01-01 T</td>
<td>IEC Materials and Conduct of massive and extensive IEC on Water, Wastewater, and Water Recycling and Reuse (DENR, MBCO)</td>
<td>2021-2040</td>
</tr>
<tr>
<td>RPL06</td>
<td>01-01 P</td>
<td>Development, Deployment, and Roll-out of Manila Bay Water Quality Decision Support System</td>
<td>2022-2024</td>
</tr>
<tr>
<td></td>
<td>Eco-System Modeling and Material Transport Analysis for the Rehabilitation of Manila bay (E-SMART)</td>
<td>2020-2022</td>
<td>11</td>
</tr>
</tbody>
</table>
**Improved Solid Waste Management**

**IMPROVE SORTING, SEGREGATION, & COLLECTION**
EMB, LGU, Community  
+ [Ecological SWM Act]

**IMPROVE WASTE DIVERSION & REDUCTION EFFICIENCY**
NSWMC, EMB, LGU, Community  
+ [Ecological SWM Act]

**[REDUCE POLLUTION LOAD]**
**IMPROVE OFF-SHORE WASTE MANAGEMENT**
PPA, MARINA, PCG

**NO OPEN DUMPSITES**
EMB + [Ecological SWM Act]

**MONITORING & STRICT COMPLIANCE SWM**
EMB, LGU + [Local SWMP]
Improved Solid Waste Management

- **ISWM01** | Improve Waste Reduction and Segregation
- **ISWM02** | Improve Collection, Recycling, and Recovery
- **ISWM03** | Improved Residual Management
- **ISWM04** | Sustain and Expand Coverage of Manila Bay Area Clean-up Activities

### Performance Indicator Table

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Unit of Measurement</th>
<th>Base Case 2015</th>
<th>Target 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Waste Diversion Rate</td>
<td>Percent of volume</td>
<td>47%</td>
<td>80%</td>
</tr>
<tr>
<td>Number of open dump sites</td>
<td>Number of sites</td>
<td>52</td>
<td>0</td>
</tr>
<tr>
<td>Action Plan No.</td>
<td>Title</td>
<td>Timeframe</td>
<td>Indicative Cost</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>ISWM01</td>
<td>01-01</td>
<td>Improve Waste Reduction and Segregation</td>
<td>2022-2040</td>
</tr>
<tr>
<td></td>
<td>• Enhanced IEC Program for Waste Reduction, Segregation, Recycling and Recovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Policy Reforms - Ban of single-use, non-recyclable, non-biodegradable plastic,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Adoption of Extended Producers’ Responsibility (EPR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISWM02</td>
<td>01-01 PP P</td>
<td>Improved Solid Waste Collection and Management Project</td>
<td>2023-2025</td>
</tr>
<tr>
<td>ISWM02</td>
<td>01-02 P</td>
<td>Waste Recycling Incentive Program</td>
<td>2022-2024</td>
</tr>
<tr>
<td>ISWM02</td>
<td>02-01 P</td>
<td>Provincial Transfer Stations with Secondary Sorting and Additional Materials Recovery Facilities in Selected Barangays</td>
<td>2023-2025, 2031-2033</td>
</tr>
<tr>
<td></td>
<td>• Proposed Provincial Plastic Recycling/Processing Facility in Cavite Province</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISWM02</td>
<td>02-02 PP P</td>
<td>Construction of 4 Large-Scale Composting Facilities</td>
<td>2023-2025, 2031-2033</td>
</tr>
</tbody>
</table>
## Waste Disposal

<table>
<thead>
<tr>
<th>Action Plan No.</th>
<th>Title</th>
<th>Timeframe</th>
<th>Indicative Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISWM03</td>
<td>01-01 P</td>
<td>Increase Capacities of Disposal Facilities for Solid Wastes of the Metro Manila and the Provinces</td>
<td>2023-2025, 2031-2033</td>
</tr>
<tr>
<td></td>
<td>- New Proposed Provincial SLFs: Nueva Ecija, Cavite, Quezon</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- MMDA-owned Integrated Disposal Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISWM03</td>
<td>01-02 P</td>
<td>Waste-to-Energy (WTE) Facilities Project</td>
<td>2023-2025, 2031-2033</td>
</tr>
<tr>
<td></td>
<td>- QC or Rizal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Metro Clark</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bulacan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nueva Ecija (open for clustering)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISWM04</td>
<td>01-03 P</td>
<td>Sustain and Expand Manila Bay Clean-up Activities</td>
<td>2022-2024</td>
</tr>
<tr>
<td>ISWM04</td>
<td>03-01 T</td>
<td>City/Municipality/Barangay Level Clean-up Drive (Weekly Clean-up Drive (DILG Circular 2019-09))</td>
<td>2024-2033</td>
</tr>
</tbody>
</table>
## Action Plan No., Title, Timeframe, Indicative Cost

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<td>ISWM04</td>
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<td>Sustain and Expand Manila Bay Clean-up Activities</td>
<td>2022-2024</td>
</tr>
<tr>
<td>ISWM04</td>
<td>03-01 T</td>
<td>City/Municipality/Barangay Level Clean-up Drive (Weekly Clean-up Drive (DILG Circular 2019-09))</td>
<td>2024-2033</td>
</tr>
</tbody>
</table>
Reduce Exposure to Flooding

WATERSHED REHABILITATION

SUPPORT TO DRRMP LCCAP + ACCESS TO PSF

DRRMP LCCAP

COASTAL LINE OF DEFENSE (STUDY + DIKE + NATURE-BASED SOLUTIONS]

COMMUNITY-BASED ADAPTATION

COMMUNITY-BASED RELOCATION

ALTERNATIVE SOURCES OF WATER

CLEARING OF WATERWAYS

REGULATE GROUND WATER EXTRACTION

RESTORE NATURAL HABITAT
Reduce Exposure to Flooding

- REF01 | Establish Manila Bay Area Water Resource and Flood Management Decision Support System
- REF02 | Establish North Manila Bay Coastal Line Of Defense
- REF03 | Design and Implement Nature-Based Flood Protection Solutions
- REF04 | Undertake Climate Resilient Solutions and Strategies, Sustainable Livelihoods, and Community-Based Relocation for People Exposed to Coastal Flooding
- REF05 | Minimize Land Subsidence
- REF06 | Enhance Disaster Preparedness and Adaptive Capacities of Coastal LGUs and Communities Affected by the Northern Manila Bay Coastal Defense
- REF07 | Improve Drainage along Major Rivers Draining to Manila Bay
- REF08 | Rehabilitate Watershed Areas in Manila Bay Area

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Unit of Measurement</th>
<th>Base Case 2015</th>
<th>Target 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of People exposed to coastal flooding</td>
<td>Number of Individuals</td>
<td>5,000,000</td>
<td>3,800,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2022</th>
<th>2030</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCR</td>
<td>3,300,000</td>
<td>3,300,000</td>
<td>3,500,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>Rest of Manilla bay</td>
<td>1,700,000</td>
<td>2,400,000</td>
<td>3,100,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>Total MB catchment</td>
<td>5,000,000</td>
<td>5,700,000</td>
<td>6,600,000</td>
<td>7,600,000</td>
</tr>
</tbody>
</table>
Reduce Exposure to Flooding

- **REF01 | Establish Manila Bay Area Water Resource and Flood Management Decision Support System**
  - Comprehensive Assessment of Coastal and Riverine Hydrodynamics and Flood Protection Structures in Manila Bay Area Project [MBTF]
  - Refinement/Improvement/Upgrading of Manila Bay Area Water Resource And Flood Management Decision Support System (DSS) [MBTF]

- **REF02 | Establish North Manila Bay Coastal Line Of Defense**
  - North of Manila Bay Define Coastal Line of Defense (CLD) Study [MBTF]

- **REF03 | Design and Implement Nature-Based Flood Protection Solutions**
  - Use of Manila Bay Area Water Resource And Flood Management Decision Support System (DSS) [MBDC, DPWH]
  - Nature-based Coastal and Riverine Flood Protection Project [DPWH]
  - Maintenance of Nature-based Coastal and Riverine Flood Protection [LGU]
Reduce Exposure to Flooding

- **REF04 | Undertake Climate Resilient Solutions and Strategies, Sustainable Livelihoods, and Community-Based Relocation for People Exposed to Coastal Flooding**
  - MB Coastal Area Community-Based Relocation Program - Phase 1 (Design and Formulation) [NHA]
  - MB Coastal Area Community-Based Relocation Program - Phase 2 (Implementation) [NHA]

- **REF05 | Minimize Land Subsidence**
  - Alternative Water Source Project [DPWH or DILG]
  - Full Implementation of Philippine Water Supply and Sanitation Master Plan (PWSSMP) [DPWH or DILG]

- **REF06 | Enhance Disaster Preparedness and Adaptive Capacities of Coastal LGUs and Communities Affected by the Northern Manila Bay Coastal Defense**
  - Capacity Building of LGUs for the Preparation and Implementation of DRRMP and LCCAP [DILG]
Reduce Exposure to Flooding

- **REF07 | Improve Drainage along Major Rivers Draining to Manila Bay**
  - Clear Obstructions in Waterways Draining to Manila Bay [DPWH]
  - Ensure waterways draining to Manila Bay is free of obstructions [LGU]

- **REF08 | Rehabilitate Watershed Areas in Manila Bay Area**
  - Pampanga River Basin Watershed Rehabilitation [DENR]
  - Bataan Watershed Rehabilitation [DENR]
  - Cavite Watershed Rehabilitation [DENR]
  - Pasig-Marikina River Basin Watershed Rehabilitation [DENR]
RESTORE NATURAL HABITAT

**COMPREHENSIVE RESOURCE & ECOLOGICAL ASSESSMENT**
DENR (BFAR, BMB, ERDB), LGU

**UPDATE STRICT PROTECTED ZONE & FISHERIES USE ZONE (ICZM PLANNING FRAMEWORK)**
MBDC, DENR, DILG, LGU

**DESIGN & IMPLEMENT HABITAT RESTORATION**
DENR, DPWH, LGU, Community

**LOCAL ORDINANCE ON HABITAT PROTECTION & MANAGEMENT**
LGU, DENR

**STAKEHOLDER ENGAGEMENT**
BFAR, LGU, Community

**REDUCE POLLUTION LOAD**

**IMPROVE SOLID WASTE MANAGEMENT**
Restore Natural Habitat

- **RNH01 | Improve Coastal Resources and Ecological Assessment and Monitoring**
- **RNH02 | Enforce Local Habitat Protection and Management**
- **RNH03 | Update Strict Protection Zone and Fisheries Use Zone in the Manila Bay ICZM Planning Framework**
- **RNH04 | Restore and Improve Management of Protected Habitats**

<table>
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<tr>
<th>Performance Indicator</th>
<th>Unit of Measurement</th>
<th>Base Case 2015</th>
<th>Target 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of Protected Natural Habitats</td>
<td>Hectares</td>
<td>182</td>
<td>22,753</td>
</tr>
</tbody>
</table>
## PAPs with Indicative Cost (in PhP Million)

<table>
<thead>
<tr>
<th>Action Plan No.</th>
<th>Title</th>
<th>Timeframe</th>
<th>Indicative Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNH01</td>
<td>01-01 P</td>
<td>Strengthening Coastal Resources and Ecological Assessment and Monitoring Project</td>
<td>2022-2023</td>
</tr>
<tr>
<td>RNH01</td>
<td>01-02 P</td>
<td>Conduct of Coastal Resource and Ecological Assessment and Monitoring every 5 years</td>
<td>2028, 2033, 2038</td>
</tr>
<tr>
<td>RNH02</td>
<td>01-03 P</td>
<td>Locally Managed Marine Protected Areas Project</td>
<td>2023-2025</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishment of LMMPA in Coastal LGUs</td>
<td>2026-2039</td>
</tr>
<tr>
<td>RNH03</td>
<td>01-01 P</td>
<td>Formulation of the Coastal and Marine Habitat Spatial Plan in Manila Bay</td>
<td>2022-2024</td>
</tr>
<tr>
<td>RNH03</td>
<td>01-02 P</td>
<td>Updating of the Coastal and Marine Habitat Spatial Plan in Manila Bay</td>
<td>2029, 2034, 2039</td>
</tr>
<tr>
<td>RNH04</td>
<td>01-01 P</td>
<td>Harmonized Rehabilitation, Restoration and Management of Protected Habitats</td>
<td>2026-2030</td>
</tr>
</tbody>
</table>
Boost Fish Biomass

**SUSTAINABLE AQUACULTURE**
BFAR, LGU, Community

**RESTORE NATURAL HABITAT**

**UNIFIED RULES & REGULATION ON FISHERIES**
MBTF/MBDC, DILG, LGU

**SEASONAL CLOSURE**
BFAR, LGU

**FISHERY MONITORING**
BFAR, LGU, Community

**UPDATE FISHERIES & COASTAL RESOURCE MANAGEMENT PLAN**
BFAR, LGU

**IMPROVE FISHERIES FACILITIES & POST-HARVEST TECHNOLOGY**
BFAR, LGU

**ALTERNATIVE LIVEHOOD**
BFAR, LGU, Community

**REDUCE POLLUTION LOAD**

**IMPROVE SOLID WASTE MANAGEMENT**
Boost Fish Biomass

- BFB01 | Enforce Fisheries and Coastal Resources Management Plan
- BFB02 | Strengthen and Management of Sustainable Fisheries in Manila Bay
- BFB03 | Rebuild Fish Stock
- BFB04 | Sustainable Aquaculture

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Unit of Measurement</th>
<th>Base Case 2015</th>
<th>Target 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish stock biomass</td>
<td>Metric tons per square kilometer</td>
<td>0.48</td>
<td>0.70</td>
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<tr>
<td>Action Plan No.</td>
<td>Title</td>
<td>Timeframe</td>
<td>Indicative Cost</td>
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<tr>
<td>BFB01</td>
<td>01-01 P</td>
<td>Capacity Building of Coastal LGUs on Community-Based Fisheries and Coastal Resources Management Planning Program - Implementation</td>
<td>2022-2040</td>
</tr>
<tr>
<td>BFB02</td>
<td>01-01 P</td>
<td>Support on Establishment of FARMCs and Formulation of a Unified Rules and Regulations on Fisheries in Manila Bay</td>
<td>2022-2024</td>
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<tr>
<td>BFB03</td>
<td>01-01 P</td>
<td>Sustainable Fisheries on 12 Priority Fish Species – Phase 1 (Assessment and IRR Formulation)</td>
<td>2022-2026</td>
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<tr>
<td>BFB03</td>
<td>01-02 P</td>
<td>Sustainable Fisheries on Next 12 Priority Fish Species – Phase 2 (Assessment and IRR Formulation)</td>
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<tr>
<td>BFB03</td>
<td>01-04 PP P</td>
<td>Setting Up of Strategic Fishery Monitoring and Enforcement System (Project Preparation)</td>
<td>2021</td>
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<tr>
<td>Action Plan No.</td>
<td>Title</td>
<td>Timeframe</td>
<td>Indicative Cost</td>
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<td>BFB03</td>
<td>02-01 PP P</td>
<td>Fisheries Facilities and Post-Harvest Technologies – Project Preparation</td>
<td>2021</td>
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<td>BFB03</td>
<td>02-01 P</td>
<td>Fisheries Facilities and Post-Harvest Technologies – Region III</td>
<td>2023-2025</td>
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<td>BFB03</td>
<td>02-02 P</td>
<td>Fisheries Facilities and Post-Harvest Technologies – Region IVA</td>
<td>2023-2025</td>
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<td>BFB03</td>
<td>02-03 P</td>
<td>Fisheries Facilities and Post-Harvest Technologies – NCR</td>
<td>2023-2025</td>
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<td>BFB03</td>
<td>01-01 T</td>
<td>Alternative Livelihood and Support Program for Fisherfolks Project (Technical Assistance)</td>
<td>2022-2040</td>
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<td>BFB03</td>
<td>01-01 P</td>
<td>Alternative Livelihood and Support Program for Fisherfolks Project (Loan Mechanism)</td>
<td>2022-2040</td>
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<tr>
<td>BFB04</td>
<td>01-01 P</td>
<td>Sustainable Aquaculture Project</td>
<td>2022-2023</td>
</tr>
</tbody>
</table>
Promote Responsible and Sustainable Tourism

RESPONSIBLE AND SUSTAINABLE TOURISM
DOT

MANILA BAY AREA TOURISM PROJECTS
DOT

ECOLOGICAL PARKS AND ECO-MUSEUMS
DOT

RESTORE NATURAL HABITATS

REDUCE EXPOSURE TO FLOODING

IMPROVE SOLID WASTE MANAGEMENT

RESPONSIBLE AND SUSTAINABLE TOURISM
DOT

RESTORE NATURAL HABITATS

REDUCE POLLUTION LOAD

BOOST FISH BIOMASS
Promote Responsible and Sustainable Tourism

**PRST01 | Strengthen Responsible and Sustainable Local Tourism Planning**
- Development of Provincial and City/Municipal Tourism Development Plans
- Monitor Enforcement of Provincial and City/Municipal Tourism Development Plans

**PRST02 | Improve Tourism Modalities in Manila Bay Area**
- Manila Bay Area Tourism Project
- Implement and Enforce Tourism-Related Policies

**PRST03 | Development of Manila Bay Ecological Park and Eco-Museum**
- Manila Bay Ecological Park(s) and Eco-Museum(s) Project
- Local Ecological Parks And Eco-Museums Project in Manila Bay Area - Funding Mechanism for LGUs
Manila Bay 2040 (Projected Impact)

- Amenity value was used as an indicator to quantify the tourism goal of the MBA.
- Utilized the four (4) identified tourism amenities in establishing amenity value, namely (i) destination attractiveness, (ii) infrastructures and facilities, (iii) financial requisites, and (iv) tourism management and schemes (MBSDMP Amenity Value Study, 2020).
- Basis for evaluation of the amenity value also included the concerned environmental aspects and indicators of the MBSDMP, such as solid waste, pollution load, and, if available, status of natural habitat (MBSDMP Amenity Value Study, 2020).
- To improve the amenity value of Manila Bay, the five (5) measures (i.e., RPL, ISWM, RFL, RNH, BFB) is further complemented by the PRST Actions

1. PRST01 supports the DOT and LGUs in strengthening responsible and sustainable Local Tourism Planning which includes preparation of local tourism development plans, tourism management action plans, and beach management plans that are consistent with the National Tourism Development Plan.
2. PRST02 supports the DOT, LGUs, and the private sector in improving tourism modalities in Manila Bay Area.
3. PRST03 provides the technical support and funding mechanism for the development of Manila Bay tourism areas and infrastructure, such as ecological parks and eco-museum.
<table>
<thead>
<tr>
<th>Action Plan No.</th>
<th>Title</th>
<th>Timeframe</th>
<th>Indicative Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRST01</td>
<td>01-01P</td>
<td>Development of Provincial and City/Municipal Tourism Development Plans</td>
<td>2022-2026</td>
</tr>
<tr>
<td>PRST01</td>
<td>01-02 T</td>
<td>Monitor Enforcement of Provincial and City/Municipal Tourism Development Plans</td>
<td>Every 5 years</td>
</tr>
<tr>
<td>PRST02</td>
<td>01-01 P</td>
<td>Manila Bay Area Tourism Project</td>
<td>2022-2026</td>
</tr>
<tr>
<td>PRST02</td>
<td>01-02 P</td>
<td>Implement and Enforce Tourism-Related Policies</td>
<td>2026, 2031, 2036, 2040</td>
</tr>
<tr>
<td>PRST03</td>
<td>01-03 P</td>
<td>Manila Bay Ecological Parks and Eco-Museums Project</td>
<td>2023-2028</td>
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<td>PRST03</td>
<td>02-01 P</td>
<td>Local Ecological Parks and Eco-Museums Project in Manila Bay Area – Funding Mechanism for LGUs</td>
<td>2023-2032</td>
</tr>
</tbody>
</table>
Enabling Environment

EE01 | Establish Institutional Set-Up and Building Capacities for MBSDMP
- The MBTF as the governing body that will oversee the implementation of MBSDMP for the short term
- Creation of the Manila Bay Development Commission as the institutional requirements for the MBSDMP

EE02 | Decongest Metro Manila
- Sustain ‘Balik Probinsya’
- Creation and promotion of new growth centers outside NCR
- Transfer Government offices outside Metro Manila
- Improvement and integration of mass transport systems (land, sea and air) to interconnect cities to suburbs
- Development of affordable housing stock
- Formulation of policies and ordinances to maximize the benefits of host communities or LGUs from major infrastructure projects
Enabling Environment

EE03 | Promote Environmentally Friendly Development
- Regulating Agricultural Land Conversion
- Passage of National Land Use Act
- Incentivizing “Green” Developments
- Develop Stream of Regulations for:
  - Climate Change Adaptation (CCA) and Disaster Preparedness
  - Climate Change Mitigation through reduction of Greenhouse Gases

EE04 | Reform and Compliance to Relevant Policies

EE05 | Comprehensive Natural Capital Accounting (NCA) for Manila Bay
- Setting of individual natural resources and ecosystem services accounts
- Valuation of the stocks and flows of natural resources and ecosystem services
- Natural resources and ecosystem services dataset management
## Enabling Environment

<table>
<thead>
<tr>
<th>Pillars of MBSDMP</th>
<th>Key Actions</th>
<th>Short Term (2020-2022)</th>
<th>Medium Term (2023-2030)</th>
<th>Long Term (2031-2040)</th>
</tr>
</thead>
</table>
| Enabling Environment | Institutional Set-up | • Establish Institutional Set-up for Medium to long Term Timeframe  
• Commence capacity building | | |
| | Decongest Metro Manila | • Sustained “Balik Probinsya” Program  
• Update/formulate and enforce related ordinances and policies | | |
| | Promote Environmental Friendly Development | • Update/formulate and enforce related ordinances and policies to promote environmentally friendly development | | |
| | Refine and Compliance to Relevant Policies | • Update/refine and enforce related ordinances and policies  
• Enforce strict compliance of policies, ordinances, codes and standards. | | |
| | Conduct Comprehensive Natural Capital Accounting (NCA) for Manila Bay | • Setting of individual natural resources and ecosystem services accounts  
• Valuation of the stocks and flows of natural resources and ecosystem services  
• Natural resources and ecosystem services dataset management | | |
Stakeholder Engagement by the numbers:

- From the Project Kick-off Meeting last February 2018 to March 12, 2020 - more than 2,391 stakeholders (51% male, 49% female) were engaged by the project.
- During the Project Inception and Situation Analysis Phase around 459 stakeholders (59% male, 41% female) were consulted and provided inputs towards producing the Situation Analysis Report and the Manila Bay Area Atlas.
- During the Project Inception and Situation Analysis Phase around 459 stakeholders (59% male, 41% female) were consulted and provided inputs towards producing the Situation Analysis Report and the Manila Bay Area Atlas.
- The barangay community consultation and validation - participated by a total of 732 (54% male, 46% female) barangay officials and community members.

See Annex Complete MBSDMP Process and activities report which provides the overall methodology, activities and process of the formulation of the MBSDMP.
Stakeholder Engagement

SE01 | Enforce Programmatic EIA
• Projects that consist of wide range of individual projects and/or implemented on a long-time frame and across an extensive area shall be required to undergo a programmatic EIA to assess the cumulative impacts of the project, and the quality of stakeholders’ participation in the development and assessment of the projects

SE02 | Information, Education, Communication, and Advocacy
• Development of IEC materials
• Establishment of online platform and resource center to access IEC materials
Gender and Development

- Sustaining the practice of collecting gender-disaggregated data in all phases of MBSDMP-related projects, programs, and activities
- Specific review and assessment to ensure gender equity is mainstreamed in project proposals
- Engagement of women during feasibility development for each PAP
- Funding proposals for each PAP included in the Master Plan are evaluated for gender impact
- Mainstream gender during implementation and allocate enough funds to ensure that gender considerations are met during the life of the project;
- GAP recommendations are consistent with existing initiatives
- Project implementation mechanisms satisfy stakeholder requirements
INSTITUTIONAL SET UP

Institutional Requirements

▪ Stimulate and effect synergy and integration of all plans, policies, and programs as well as across all stakeholders of Manila Bay Area

▪ Exact compliance while leverage existing strengths and opportunities to all concerned agencies and LGUs

▪ Having the capacity to mobilize various resources and multi-sector collaboration within limited timeframes

▪ Ability to withstand political dynamics and changes in government

▪ Agile and responsive – able to respond faster to changing contexts (less bureaucracy)

▪ Sustain the momentum of the Manila Bay Task Force and the formulation of the MBSDMP
Manila Bay Development Commission (MBDC)

What it is NOT

▪ Not an implementing agency on matters pertaining to Manila Bay’s sustainable development
▪ Not an investment sourcing agency that will access, manage and allocate local and international funds for Manila Bay development projects

What it is

▪ Primary agency for integration and oversight of implementation of plans, policies and programs of agencies and LGUs
▪ Under the **Office of the President** headed by a Cabinet Secretary
▪ Created by law to ensure continued existence, stability and funding
Mandates

01
Ensure integration, complementation, and consistency of all development plans and efforts in or that will be affecting Manila Bay to the MBSDMP.

02
Provide focused, integrated, science-based, agile, efficient, and timely response through relevant agencies and local government units in addressing pressing challenges and concerns in MBA.

03
Ensure stakeholder engagement and participation in the whole process towards building sustainability of efforts and investments.

04
Continuously monitor and evaluate results of efforts and interventions in or that is affecting Manila Bay, and ensure that the MBSDMP is properly updated and remains steadfast and true to its objectives.
Basic Organizational Structure

Created through the passage of a law.

Under the Office of the President for administrative purposes, is headed by a chairperson and four commissioners, each having a term of office of four years.

The Commission En Banc acts as a collegial body in formulating plans, policies and strategies relating to Manila Bay and the operation of MBDC.

Technical Services groups are aligned with the Measures identified by the MBSDMP. They focus on plan and program integration, monitoring and evaluation of implementation, technical advice, among others.

Technical Support groups fulfill important key result areas to support Technical and Legal services.

Policy & Legislative Services provide policy analysis and recommendations; ensures alignment and consistency in policies created by different major bodies, and provide legal advice to law-making bodies.
Transition Process

**Endorsement of MBSDMP**
- DENR thru the MB Task Force passes a department resolution endorsing the MBSDMP to the President as the long-term sustainable development framework for MB.
- MBTF leads execution of MBSDMP Short-Term PAPs.

**Adoption of MBSDMP**
- Issuance of EO adopting the MBSDMP as the development framework for MB and with DENR thru MBTF as lead agency in setting up the MBDC thru HB (Draft EO available).
- MBDC House Bill set as priority (Draft Bill and Staffing Pattern of the Commission available).
- MBTF continues to lead execution of MBSDMP Short-Term PAPs.

**Creation of MBDC**
- MBTF continues to lead execution of MBSDMP Short-Term PAPs while supporting establishment of and transition of responsibilities to MBDC.
- MBTF continues to lead execution of MBSDMP Short-Term PAPs.
- MBDC commences execution of MBSDMP.
- MBDC prepares its strategic plan and annual workplan and budget for 2024.

2021 | 2022 | 2023