



Mapagkalingang pamahalaan sa maginhawa at masayang Malabonian



## **MANDATE**

 Develop, implement and supervise environmental related projects in the city and enforce all laws, regulations, policies and ordinances pertaining to environmental management and pollution control for the public safety

## **VISION**

An office known as the "PROTECTOR OF ENVIRONMENT" with empowered personnel and balanced, sustainable and healthful ecology programs attuned to the present situation gearing to industrialization for the benefit of the current and future Malabonians

# **MISSION**

To enhance the quality of the environment prioritizing the health of our constituents viable to the City's economic growth.

# **ORGANIZATIONAL OUTCOME**

Efficient, Effective, Responsive Enabling Environment for a Sustainable Environment and Natural Resources Management ensured

# IMPLEMENTATION OF CITY ORDINANCE 04-2012 also known as the "Anti-Littering Ordinance"

# **COMPARATIVE REPORT**

				195365 23	AND DESCRIPTION OF THE PERSON		
	TOTAL						
YEAR	APPREHENSION PAI	DAID	COMMUNITY	NOTICE	SUMMON		
		PAID	SERVICE	SERVED	SERVED		
2012	3018	178	91	-	362		
2013	1657	443	139		815		
2014	2837	796	226		2822		
2015	2604	767	271		1807		
2016	3406	1064	584		2249		
2017	909	689	194	219	207		
2018	668	304	196	150	0		
2019	357	280	77	30	0		
2020	502	284	12	25	20		











# Information, Education, Communication





# Information, Education, Communication Campaign

(Public schools, Barangay, communities, senior citizen, 4Ps beneficiaries

# COMPARATIVE REPORT

YEAR	PARTICIPANTS
2020	508
2019	7,112
2018	1,466
2017	1,725
2016	2,161

# IEC Report 2020

NO.	DATE	SEMINAR/ WORKSHOP	MALE	FEMALE	TOTAL	VENUE
1	Feb. 23	Training on Urban Gardening	10	2	12	Penthouse
2	Mar. 11	Workshop on Implementation of SAS	5	33	38	Penthouse
3	Mar. 12	Workshop on Implementation of SAS	7	24	31	Penthouse
4	Mar. 13	Barangay Potrero Solid Waste Management Committee Meeting/ Orientation				Brgy. Potrero Hall





#### **IMELDA INTEGRATED SECONDARY SCHOOL**

January 24, 2020 | 9:00 – 11:00 AM





#### **MALABON NATIONAL HIGH SCHOOL**

January 24, 2020 | 2:00 – 4:00 PM





#### **BARANGAY ENVIRONMENTAL POLICE SEMINAR / TRAINING**

February 24, 2020 Malabon Amphitheater, Barangay San Agustin







**ECO BRICK TTRAINING/ WORKSHOP** 

February 27, 2020 Malabon National High School

# **Workshop Re: Implementation of City Ordinance No. 27-2020**

(An ordinance providing for the implementation of proper waste segregation in households and business establishments at source)

March 11-12, 2021
Penthouse, Malabon City Hall Building













# TRAINING ON URBAN GARDENING

February 23, 2021
Penthouse - Malabon City Hall Building









# SOLID WASTE COLLECTION

YEAR	TOTAL VO	WASTE DIVERSION		
	RESIDUAL			
2016	261,088	76,118	39,002	51%
2017	244,899	132,663	57,717	60%
2018	265,850	133,391	90,644	58%
2019	285,014	151,276	149,777	77%
2020	317,310	122,631	141,303	68%

# **MATERIALS RECOVERY FACILITY (MRF)**

2016



Potrero 2017



Concepcion



Catmon



**City Hall MRF** 



**Hulong Duhat** 



**Tonsuya** 

#### 2018



**Dampalit** 



Niugan



**Bayan- Bayanan** 



**San Agustin** 



**Panghulo** 



**Tinajeros** 

## 2020



**Tugatog** 



# ISSUANCE OF CERTIFICATE OF ENVIRONMENT CLEARANCE CEC 2020

MONTH	CEC	NOV-COVERAGE
JULY	47	13
AUGUST	31	10
SEPTEMBER	58	15
OCTOBER	51	28
NOVEMBER	45	17
DECEMBER		
TOTAL	232	83

# TRASH TRAPS SUMMARY OF COLLECTION 2020

MONTH	NO. OF TRIPS	VOLUME (CU.M)	
JANUARY	375	1,500	
FEBRUARY	375	1,500	
MARCH	375	1,500	
APRIL	375	1,500	
MAY	375	1,500	
JUNE	375	1,500	
JULY	375	1,500	
AUGUST	375	1,500	
SEPTEMBER	375	1,500	
OCTOBER	375	1,500	
NOVEMBER	375	1,500	
TOTAL	4,125	16,500	

# ENVIRONMENTAL MANAGEMENT PROTECTION

YEAR	PLANT PRODUCTION	SEED DISTRIBUTION	TREE PLANTING	LANDSCAPING	BOKASHI
2016	12,451	971	10,098	71	224
2017	15,750	1,205	18,167	74	98
2018	14,337	1,821	25,317	76	146
2019	18,799	2,391	215	217	407
2020	5,349	2,834	188	100	402

# TREE PLANTING







### **LANDSCAPING/ VERTICAL GARDENING**





# WEEKLY CLEAN- UP OPERATION of Esteros, Creeks and Rivers







#### **NARRA TREES DISTRIBUTION**

PNP MALABON (COP ANGELA Q. REJANO)



•PNP MALABON (FERDINAND M DEL ROSARIO)



PNP MALABON (PLT MANNY RIC Z. DELOS ANGELES



#### VEGETABLE SEEDS PLANTS DISTRIBUTION











#### ORNAMENTAL PLANTS DISTRIBUTION







# AWARDS/ RECOGNITIONS

Certificate of Recognition for the unwavering support and dedication to clean, preserve and rehabilitate Manila Bay

Certificate of Recognition for its solid commitment to the Adoptan-Estero / Water body Program





Plaque of Recognition for their commitment and leadership in implementing Zero Waste in the Philippines given January 31, 2019 on the occasion of the 20<sup>th</sup> Anniversary Celebration of Mother Earth Foundation, Sulo Hotel, Quezon City, Philippines

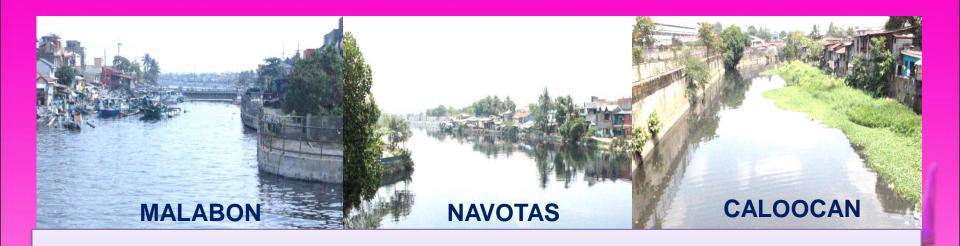
Plaque of Recognition for leading the Zero Waste work in the Asia Pacific Region and their unrelenting and unwavering support towards a Zero Waste World given the 16<sup>th</sup> day of October 2019, The Light Hotel, Penang, Malaysia

For exemplary performance in the indicators under Solid Waste Management Cluster in the 2020 Assessment of LGUS Compliance with MBCRP with a score of **98.6%** 









# MALABON-NAVOTAS-TULLAHAN-TINAJEROS (MaNaTuTi) RIVER SYSTEM DESIGNATION AS Water Quality Management Area (WQMA)



**QUEZON CITY** 



## INTRODUCTION

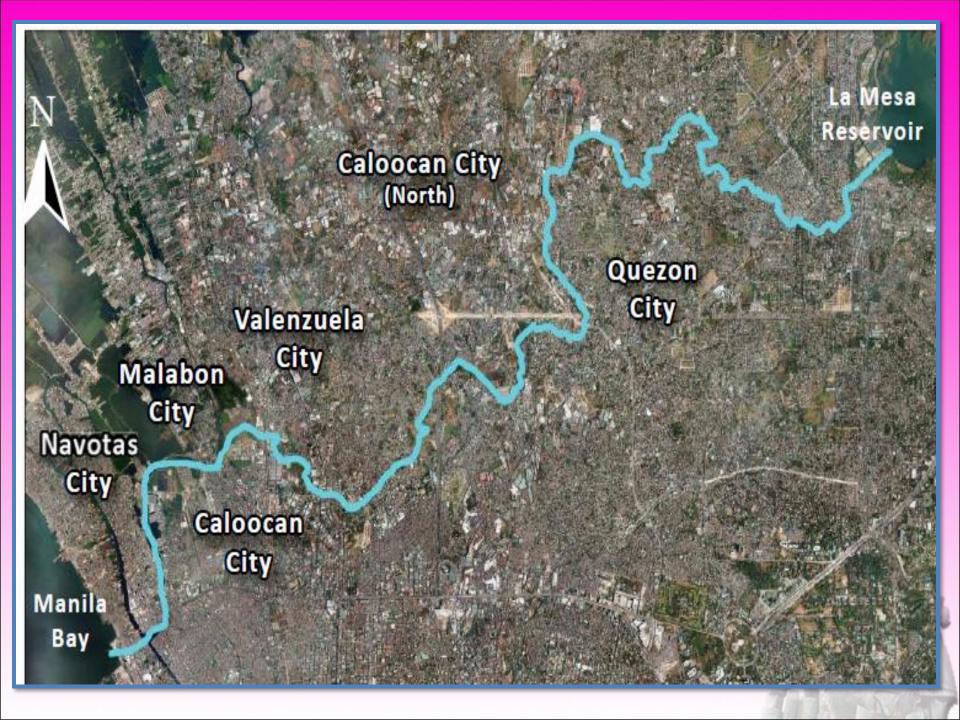
- The Malabon Navotas Tullahan Tinajeros (MANATUTI)
  River System is one of the three major river systems
  delineated and designated as Water Quality Management
  Area on July 2, 2018 by virtue of DAO 2018-10. MANATUTI
  River System are composed of Malabon, Navotas,
  Valenzuela, Caloocan, Quezon City and Manila.
- The proposed MANATUTI River System WQMA spans from the La Mesa Water Reservoir located in Barangay Fairview, Quezon City to its base at the mouth of Manila Bay in Navotas, Centennial Park, Navotas City. The Tullahan River has a total length of **36.4** kilometers and has an average width of 5 meters and depth of 3 meters. The length of the Tullahan River per LGU is as follows (a) Caloocan, 3.56 kms; (b) Malabon, 10.34 kms; (c) Navotas, 5.9 kms; (d) Quezon City 5.89 kms and Valenzuela, 10.71 kms.
- The river functions as natural drainage from Quezon City to Malabon area that funnels excess rainwater, including liquid and solid domestic and commercial/industrial wastes.

# HISTORICAL BACKGROUND:

Pursuant to Section 5 of RA 9275 otherwise known as the Clean Water Act of 2004 and its Implementing Rules and Regulations (DENR Administrative Order No. 2005-10) and DENR Memorandum Circular 2009-15 or Procedural Manual for the Designation of Water Quality Management Area (WQMA), an innovative approach to address water quality issues at the regional scale, the designation of the MaNaTuTi River System is recommended.

The objective of the WQMA is to protect, thru stakeholders collaboration, the water body and its tributaries by keeping their water quality within the Water Quality Guidelines or Criteria conforming to the water body's classification (e.g., Class C or Class SC) or even improve the quality to higher classification (e.g., from C to B or SC to SB). A WQMA Action Plan will be prepared in order to address water quality issues and problems in the area and later result to the improvement or better water quality of the said water body

The preliminary activities for the proposed MANATUTI WQMA started in 2013 which focused on the current issues and problems in the river system. And was approved on July 2, 2018



# WQMA ROADMAP from Designation



#### Background

WATER **QUALITY MANAGEME NT AREA** (WQMA) Designation

(EX. SJRS WQMA, **MANATUTI** and LPP RS WQMA)

#### **Pressures**

(What are the pressures/ hindrance s for having a clean water)

(What are (Based on the the action plan, how far have we done?) water several and

#### Assessment

intervention s done to achieve your targets for a better quality/ support to activities projects)

#### Implementat ion/ Compliance

(Based on the existing policies (environme ntal/Nation al/local laws), how far does the WQMA do to comply and implement it)

#### Integrating **CCA-DRR**

(What are the adaptatio n measures identified)

#### Monitoring/ **Impact**

(Based on the monitorin g resultsidentify drivers. challenges and actions/ strategies to be done to improve it)

#### Response

(Set targets/ prioritize based on the action plan) Ex. By 2020, where will your **WQMA** already as per **OPMBCS** 

Based on the observance of Local Government Units and communities the Malabon-Navotas- Tullahan- Tinajeros River System face severe risk to compound hazards such as flooding exacerbated by ground subsidence, sea level rise and storm surge, fire, liquefaction resulting from earthquake and public health outbreaks made favorable by increasing temperature, environmental pollution and congestion.

The inclination of LGUs toward collaboration and transformation for improve governance are important capacities that enhance resilience to disaster. So the MANATUTI- WQMA Governing Board decided to pilot and conducted risk assessment of the river system using the Integrated Risk Management, Landscape and Urban Resilience Approach through the help of Partners for Resilience (PfR), CARE, ACCORD and Caritas of Caloocan.

Workshop on Mainstreaming Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) in the MaNaTuTi RS







# Accomplishment from the workshop

Identify the main hazards present in MANATUTI and analyze their interrelationships;

Identify the main vulnerabilities and capacities of the communities in MANATUI and analyze them according to the urban poor resilience framework

Determine the worst- case scenarios and analyze the interrelationships between the hazards and vulnerabilities and capacities of the communities in MANATUTI

Identify gaps and synergies in MANATUTI as an urban landscape for future risk management plans.

# **SIGNIFICANCE**

It provides both technical and social information that serve as a springboard for future development programs of both local and international civil society organizations, especially those that champion the principles of disaster risk reduction, climate change adaptation and ecosystem management and restoration

It provides a synthesis of relevant literature that serve as starting material for local and international academic and research institutions

It serves as a compendium of experiences that reflects the built resilience of the communities in MANATUTI and lessons to reflect on to further safeguard safety and welfare.

#### **PRESSURES**

#### I. SOLID WASTE

Domestic waste disposal of communities along the MaNaTuTi River System and its tributaries causing pollution and health risks

City Solid waste (uncollected/irregular collection of garbage resulting to dumping in the streets, unregulated junkshops

Short lifespan, low durability and disposability of people's necessities that lead to the continued consumption and generation of solid wastes

Indiscriminate disposal of solid wastes in waterways

Low compliance in systematic handling/storing/collecting/treatment of hazardous wastes aligned to R.A. 6969

# II. LIQUID WASTE

- High cost of treatment facility and system
- Lack of regulation for siphoning
- Lack of wash facilities
- Lack of implementation of laws
- Non-compliance of companies
- Limited monitoring stations

## III. INFORMAL SETTLER FAMILIES

- 1. Structures/obstructions and other encroachments along easement areas
- 2. Presence of Informal Settlers in River Banks
  - Ensuring relocation sites with basic necessities like hospitals, schools, markets, water, electricity, livelihoods
  - Process of census and relocation, especially those not covered by the census poses a problem
  - 3. Sunken Vessels/ dilapidated and non-operational
  - 4. Exceedance of Water Quality Parameters
  - 5. Lack of Political Will
  - 6. Lack of Coordination on Monitoring, Assessment and Evaluation of resettlement activities/programs

## IV. HABITAT

- Increase number of population along the easement or near the easement
- Abandoned Fishing Vessel used as residence
- Loss of Livelihood for the displaced residence
- Lack of education / information from the community
- Issue on Reclamation
- Improper Solid Waste Management affecting the water quality

# IMPLEMENTATION / COMPLIANCE

- 1. Ongoing partnerships with NGOs
- 2. Partnership with Commercial, Industrial and Institutions along MANATUTI RS
- 3. Implementation of all Local and National Environmental laws
- 4. Pertaining to WQMA (stage planning)

#### **ACCOMPLISHMENT**

- Conducted field monitoring and drone survey at MANATUTI RS WQMA
- Conducted Pollution Load Assessment Initial Study (2018)
- Integrated DRR-CCA on the action plan of MANATUTI WQMA
- Water Quality Monitoring Equipment (WQME) Installed at Navotas Marine Tree Park
- 5. Construction of Automatic Trash Rake (ATR) at Malabon area.
- Mangrove Planting and provision of seedlings at Malabon and Valenzuela area in partnership with Catholic Relief Services, Philippines
- Construction of Mangrove Nursery at Malabon City in partnership with Catholic Relief Services, Philippines
- The Lingunan creek of MANATUTI River System WQMA won 1<sup>st</sup> Place at GAWAD ILOG Awarding ceremony 2020
- 9. The DENR- MBCO donated trash raft to three barangays Malabon for waterways clean up
- 10. San Juan RS AND Las Piñas Paranaque RS WQMA conducted a mainstreaming DRR-CCA to their action plan using IRM, Landscape and Urban Resilience



**Trash Raft** 

Mangrove Nursery



# I. Map of Four (4) WQMEs

