

### Septage Management in Eastern Manila: The Manila Water Experience

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29 May 2014

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#### **The Situation in 1997**



3% of Population
Connected to
Sewerage Systems



Using Only
Septic Tanks

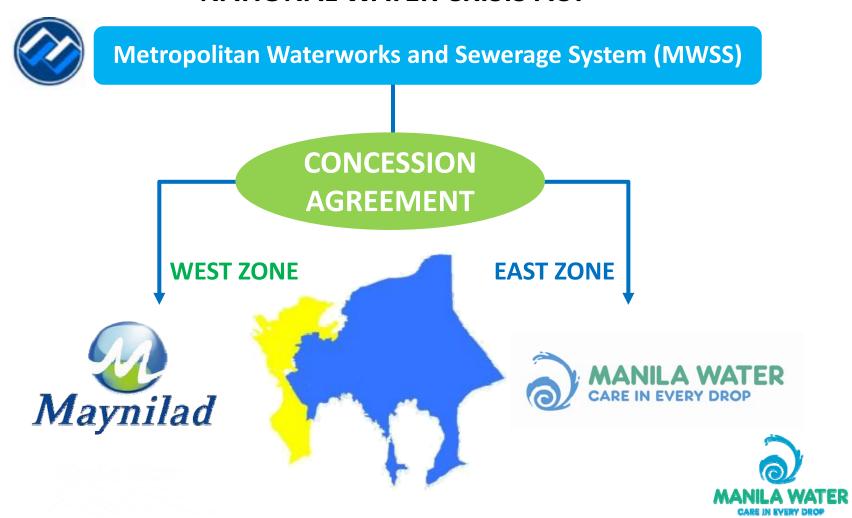


58% of Pollution
Contributed by
Domestic Sources



### 1997 Regulatory Reform "PPP"

#### **NATIONAL WATER CRISIS ACT**



## **PPP Objectives**



In drepand Operation & Officiagecy



## **Challenges in Sanitation**









**Low Coverage** 

Operational Issue

Organizational Constraints

**Customer Acceptance** 



### Septage Management Programs

**Fast Track Sanitation Plans** 

**Proactive Technical Solutions** 

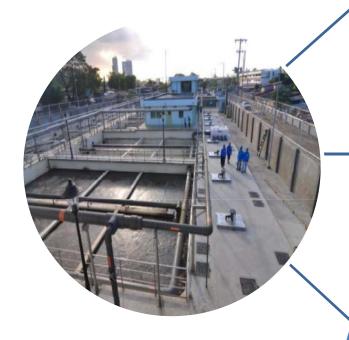
**Structure Transformation** 

**Strengthen Relationship and Involvement** 



#### **Sanitation Plans**

Communal Septic Tanks



Septage Management

COMBINED SEWER-DRAINAGE SYSTEMS









#### **Proactive Technical Solutions**



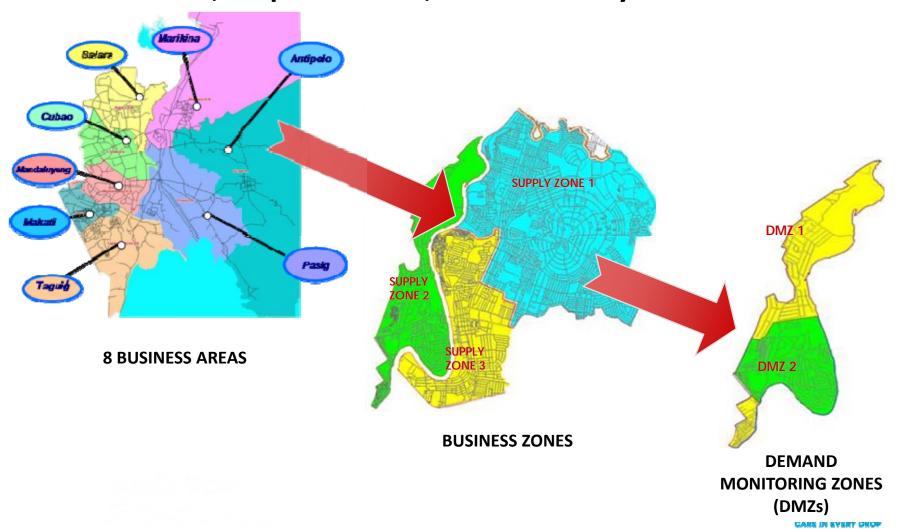
- Larger capacity trucks for wide roads
- Smaller capacity for areas with difficult or narrow access
- Vacuum Trucks Capacity:
  - 10m<sup>3</sup>
  - 5m<sup>3</sup>
  - 1.5m<sup>3</sup>

- 78 Vacuum Tankers for Desludging
- 2 Septage Treatment Plants (SpTP)
- 1,005,128
  Households Desludged



#### **Structure Transformation**

**Decentralization, Empowerment, Accountability** 

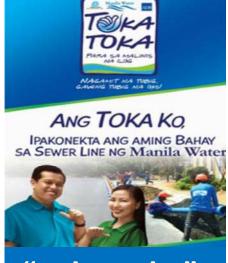


### **Wastewater Advocacy**









#### Goal

Social Awareness on Used Water Management

# Solid Waste Campaign

Drainage and River Clean-up

## Water Trail Program

Tour and Education Program

#### "Toka Toka" Campaign

Everyone has a Responsibility to the environment



# Performance Monitoring and Evaluation by the MWSS Regulatory Office

#### Service Levels

# Operational Efficiency

#### **Customer Service**

- Coverage Area
- Population Served
- Households Desludged
- Effluent Compliance

 Unit Costs for Desludging, Hauling, Treatment & Disposal

- Response Time
- Public Assessment of Sanitation Services by MWSS and 3<sup>rd</sup> party





www.manilawater.com
Customer Service Hotline 1627