



REPUBLIC OF THE PHILIPPINES  
METROPOLITAN WATERWORKS AND  
SEWERAGE SYSTEM

# WATER SECURITY LEGACY FOR METRO MANILA

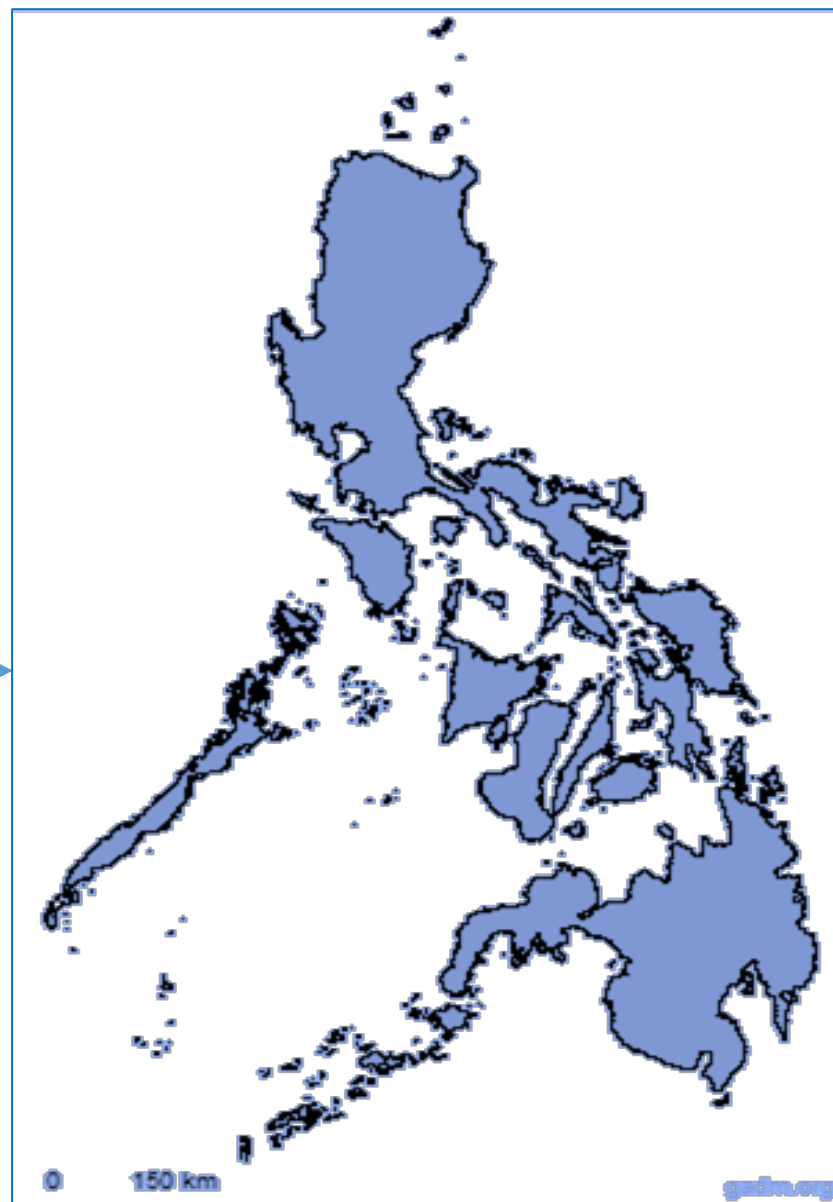
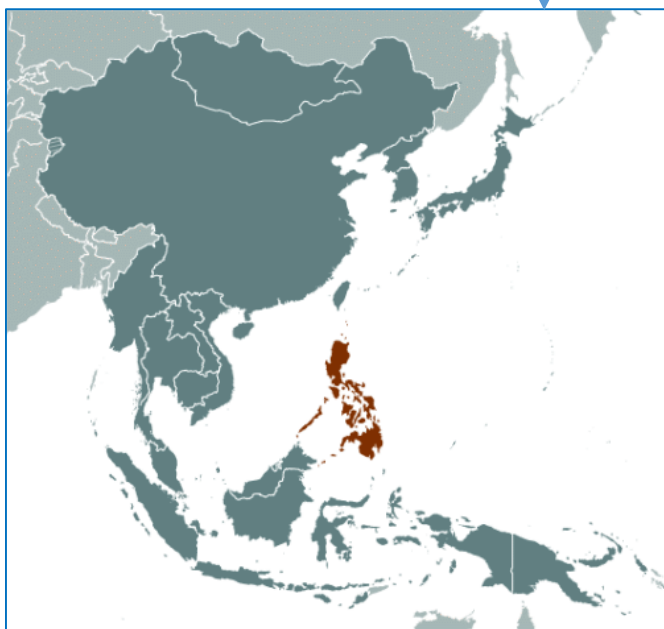
September 2019

1. All about the Philippines
2. About the MWSS
3. MWSS Water Security Legacy Plan

# All about The Philippines



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## THE PHILIPPINES

No. of Islands	7,107
Regions (Adm.)	17
Provinces	81
Cities	145
HUCs	33
Municipalities	1,489
Barangays	42,036
Total Area (km <sup>2</sup> )	300,000
Land	298,170
Water	1,830

# Weather pattern of The Philippines



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Annual Average Rainfall = **2,400 mm**  
Maximum Annual = **5,000 mm**  
Minimum Annual = **< 1,000 mm**

1

Two pronounced seasons: Dry from November to April, wet during the rest of the year

2

No dry season with a very pronounced rainfall from November to January and wet during the rest of the year.

3

Seasons are not very pronounced; relatively dry from November to April, wet during the rest of the year.

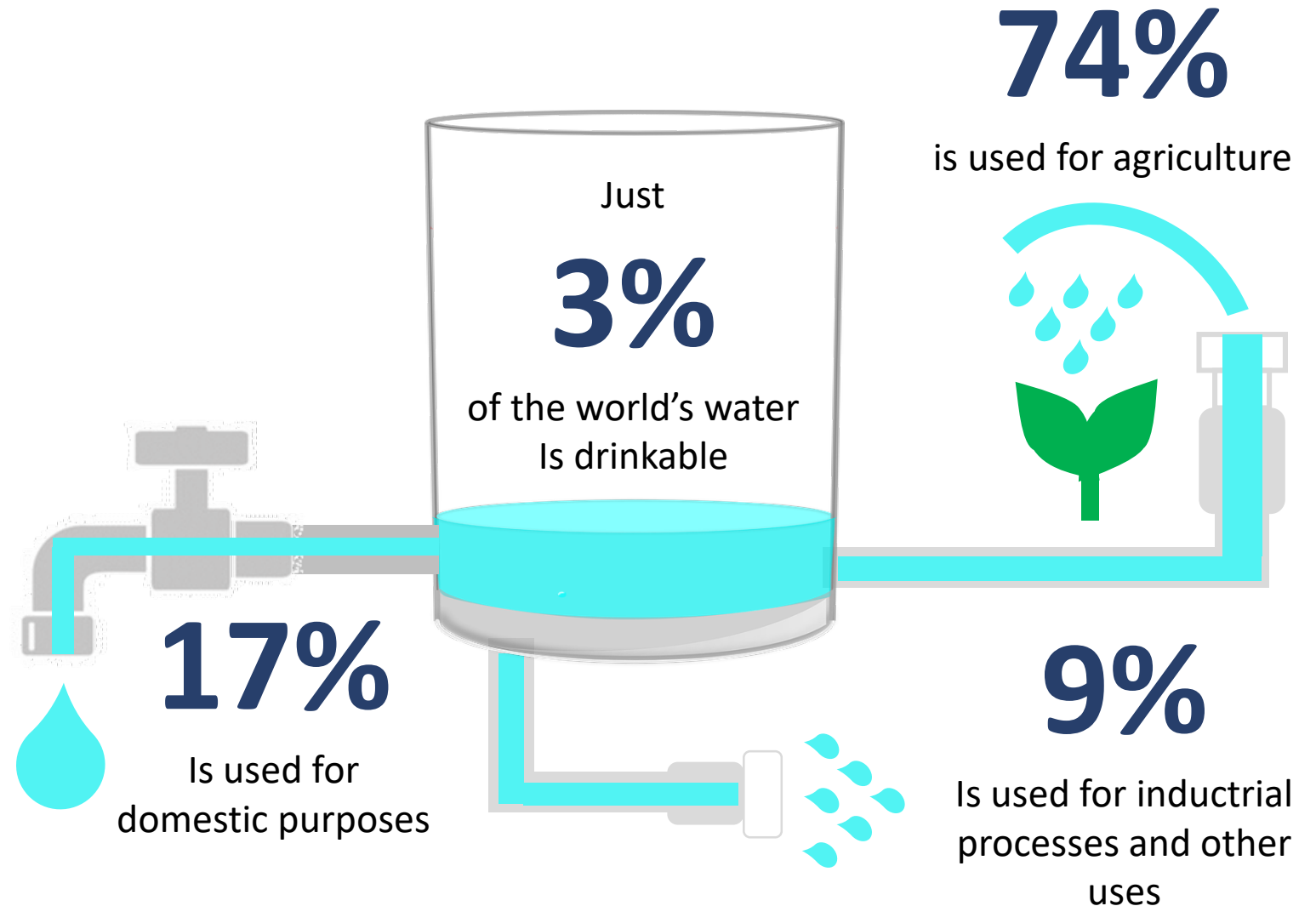
4

Rainfall is more or less evenly distributed through the year.

# Water use of The Philippines



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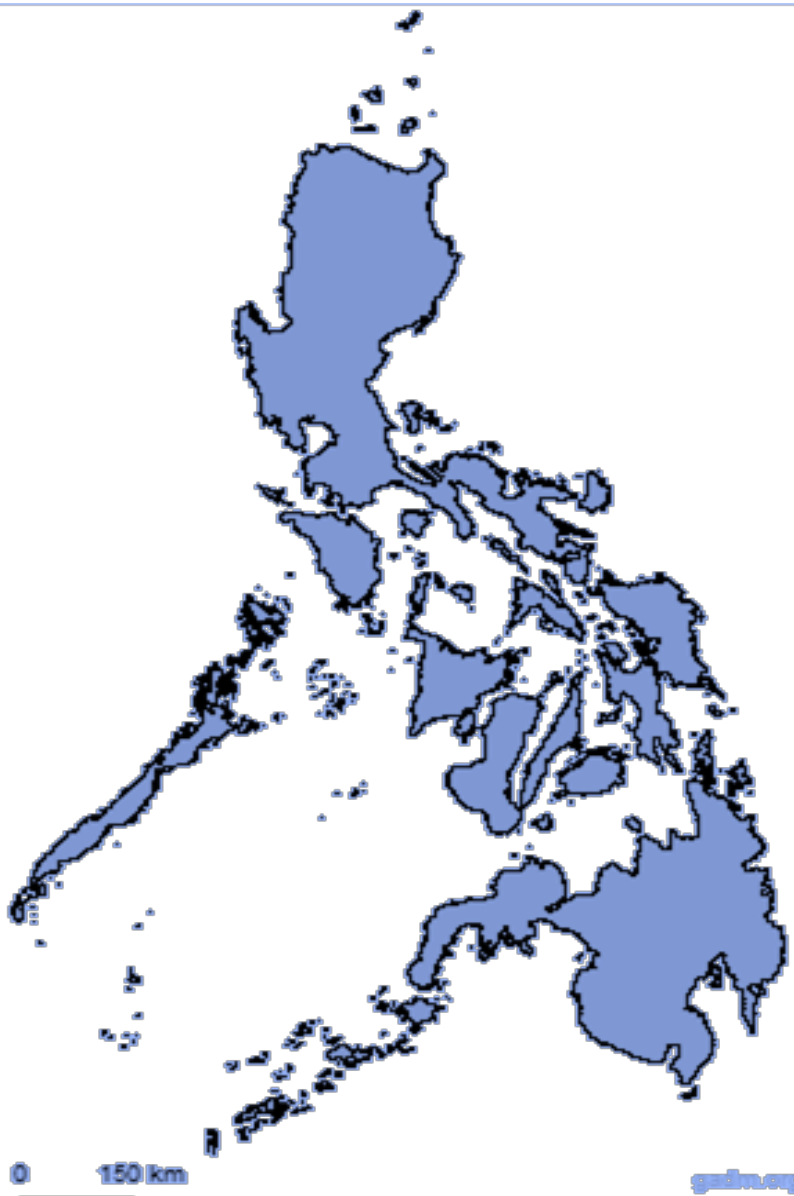


# Water Agencies of The Philippines



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## List of the Water Agencies



MWSS



Department of Public  
Works and Highways  
(DPWH)



Local  
Water  
Utilities  
Administration



National Water  
Resources Board



Philippine  
Association of  
Water  
Districts






# About the MWSS



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MWSS was created in 1971 under R.A. No. 6234 which has jurisdiction, supervision and control over all waterworks and sewerage systems within Metro Manila and some cities/towns in nearby provinces of Cavite and Rizal for a total service area of 1,940 square kilometers.

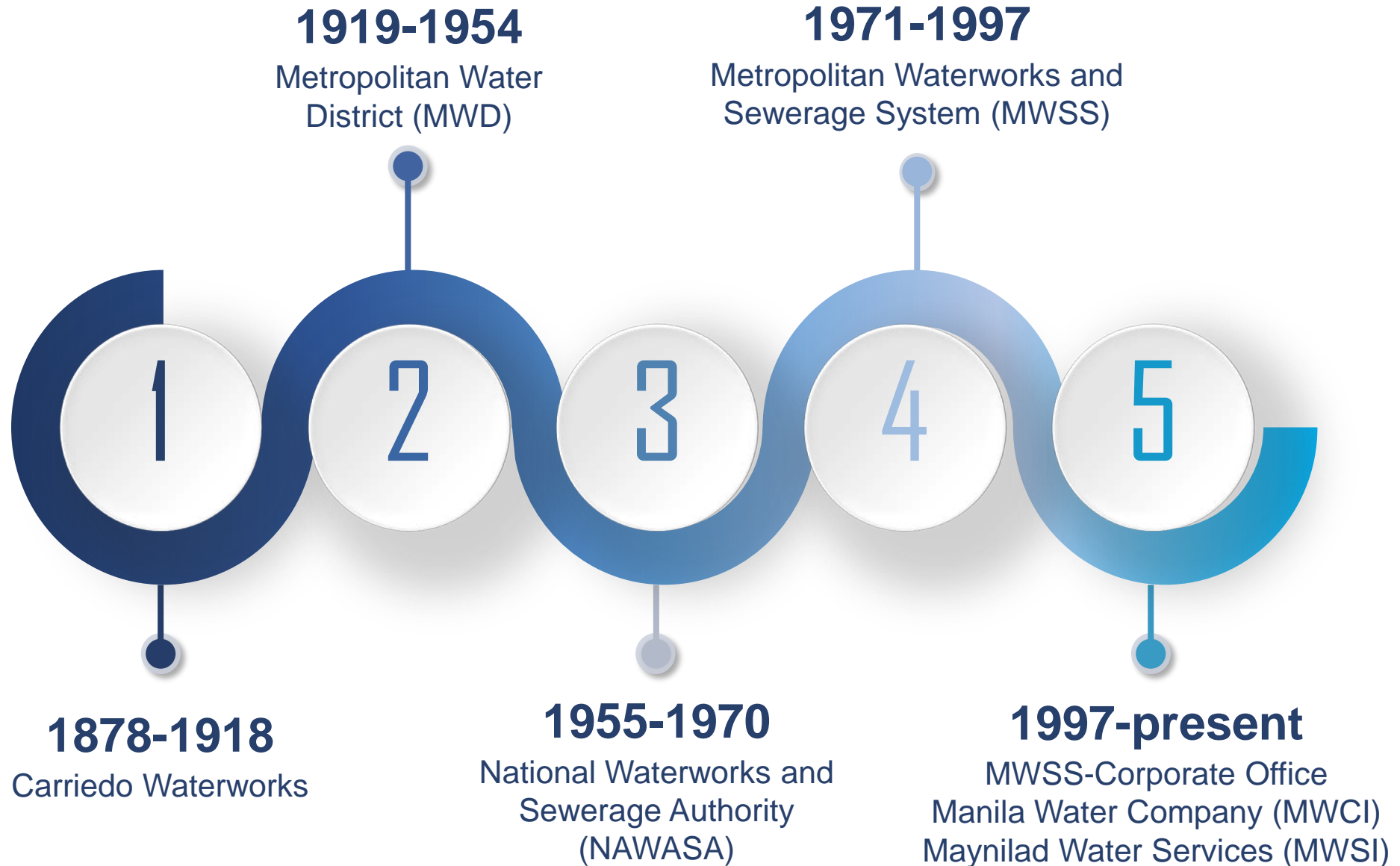
- **Ensure uninterrupted adequate supply and equitable distribution of safe potable water at an affordable price in an equitable manner.**
- **Contribute to public health and safety through the maintenance and improvement of the urban environment and securing of a sanitary environment.**
- **Secure environmental conservation to preserve the quality of human life and ecological systems and prevent ecological deterioration and pollution.**

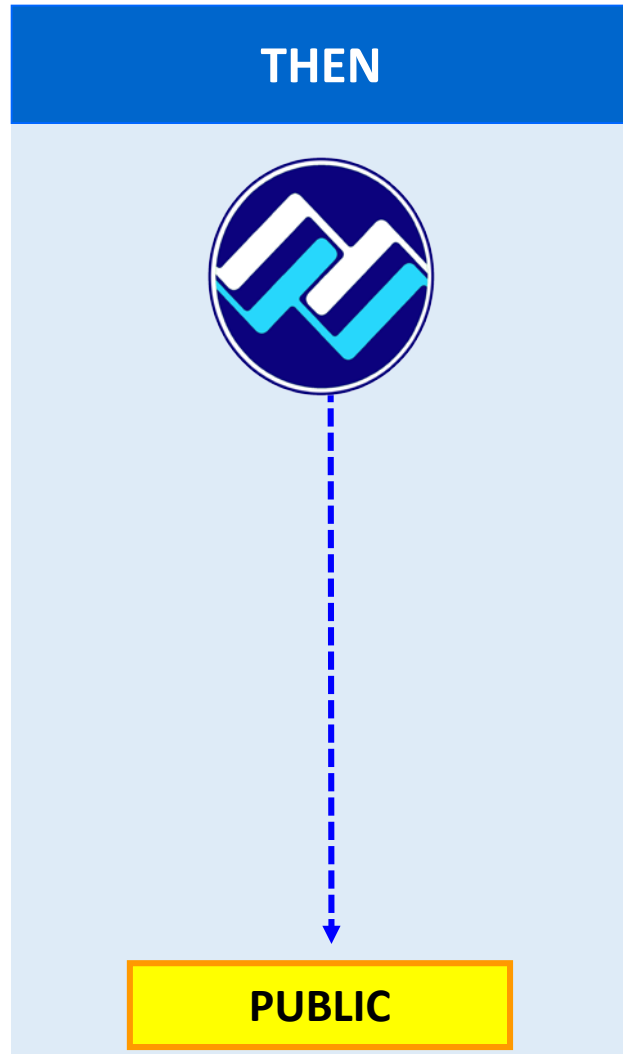


# MWSS Brief History

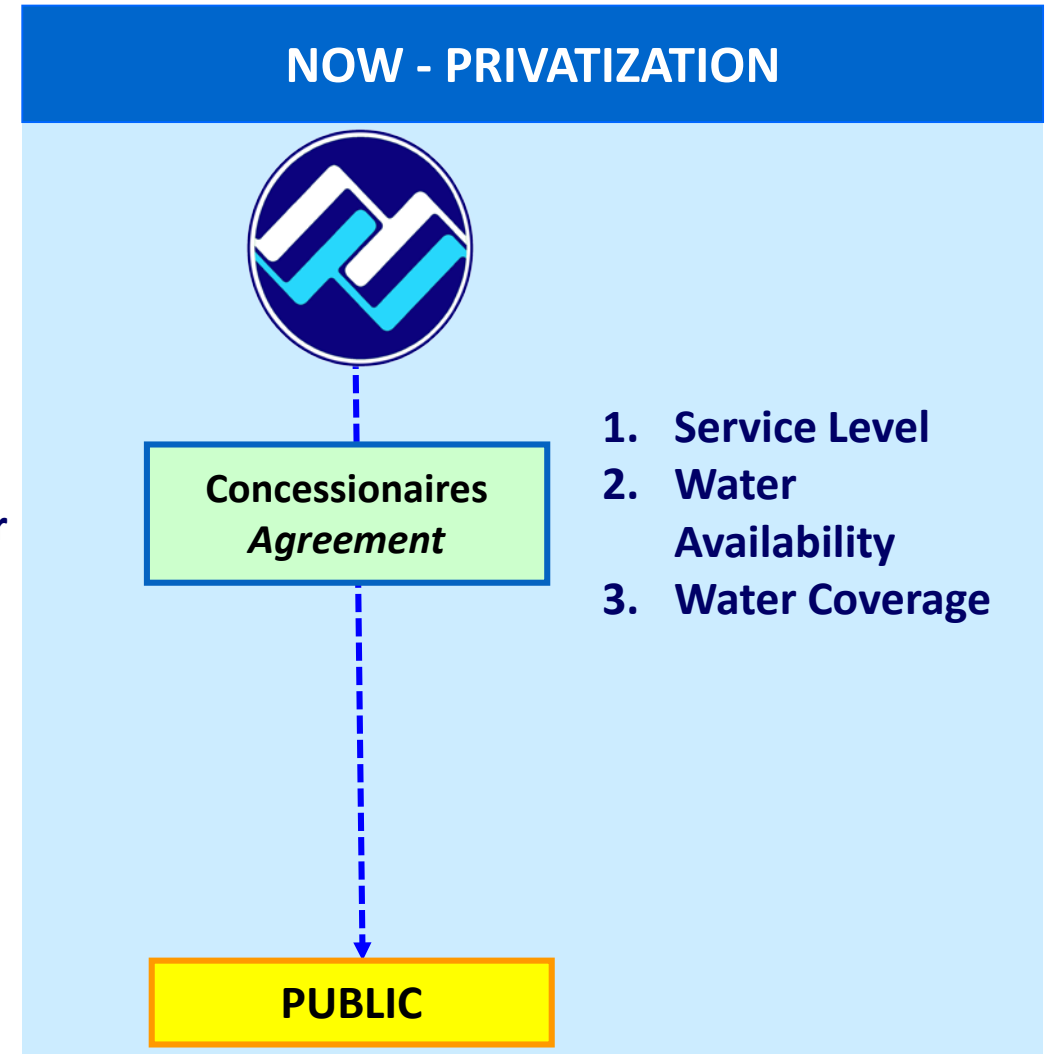


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- 
1. Increasing Population
  2. Government has limited budget
  3. To improve water delivery
  4. Expand Coverage
  5. Develop New Water Source





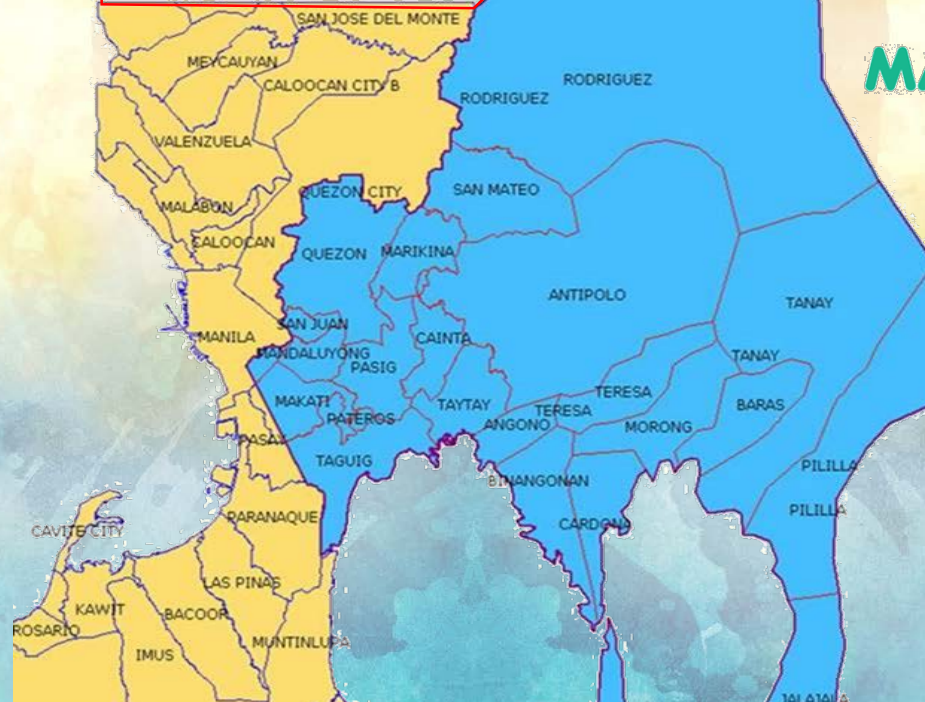
## West Zone

- North Quezon City
- North Caloocan
- Valenzuela
- Malabon
- South Caloocan
- Manila
- Pasay
- Makati
- Parañaque
- Cavite
- Las Piñas
- Muntinlupa
- Cavite

## LUZON CLEAN WATER DEVELOPMENT CORPORATION

### Province of Bulacan

- 22 Water Districts

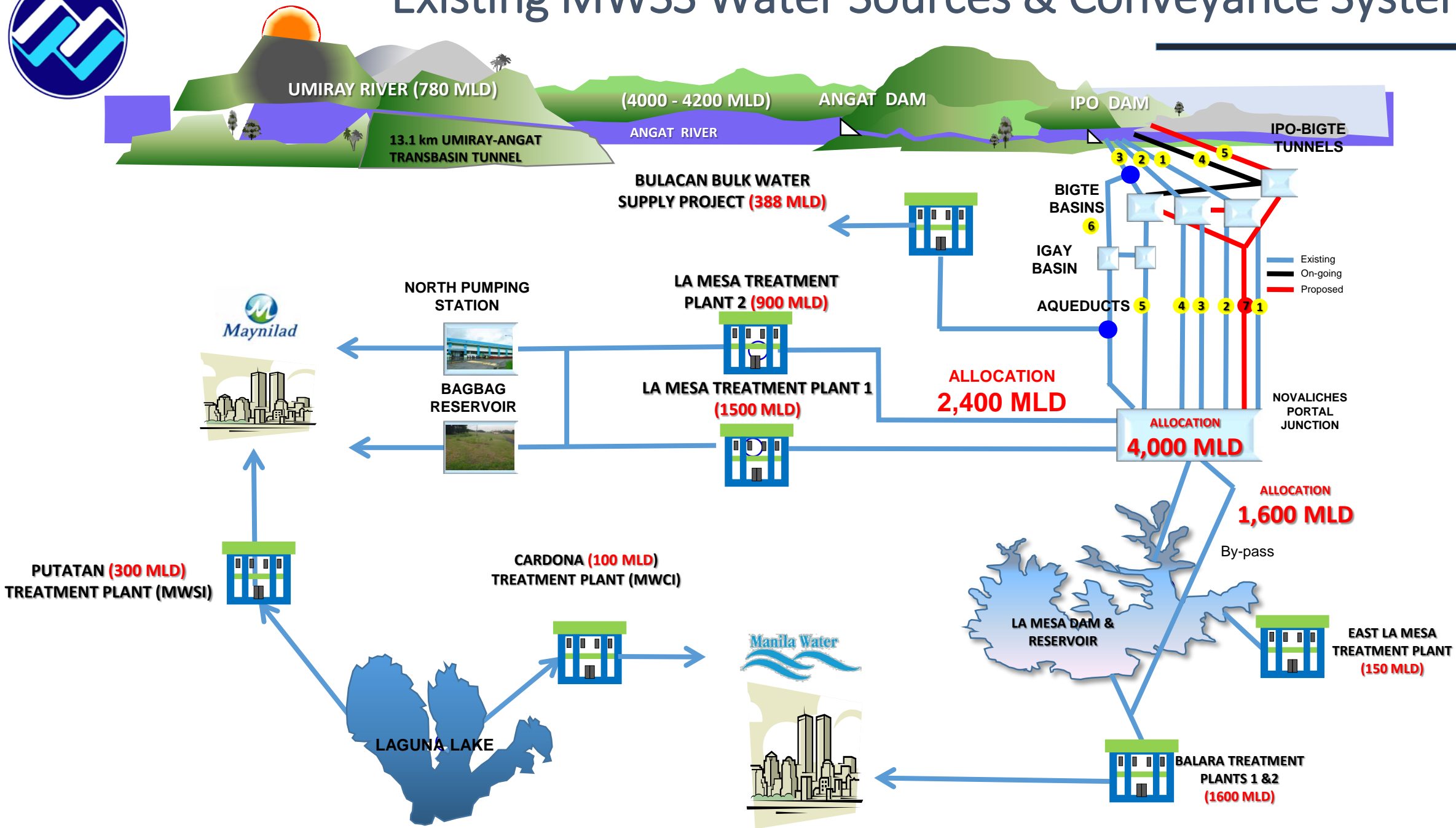


## East Zone

- Parts of Quezon City
- Marikina
- Pasig
- Pateros
- Taguig
- Makati
- Mandaluyong
- San Juan
- Parts of Manila
- Rizal Province



# Existing MWSS Water Sources & Conveyance System







## Population Served

FROM **5.82M**  
TO **16.0M**



## Water Supply Coverage

FROM **48%**  
TO **94%**



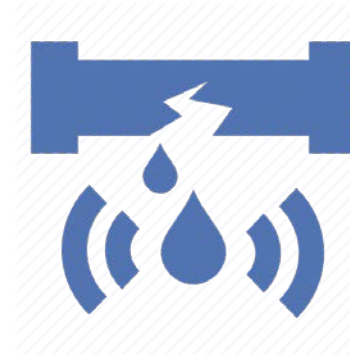
## Sewer Coverage

FROM **9%**  
TO **17%**



## Sanitation Coverage

FROM **1%**  
TO **20%**



## Non-Revenue Water

FROM **61%**  
TO **25.5%**

# MWSS Water Security Legacy Plan



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## Water Infrastructure Development and Resource Management Protection



### 1. INFRASTRUCTURE DEVELOPMENT

- Water Supply-Demand Study
- New Centennial Water Source Development – Kaliwa Dam Project
- Ipo Dam 3 Project



### 2. TECHNOLOGY

- Water Flow Monitoring at the Raw Water sources



### 3. INFRASTRUCTURE MAXIMIZATION

- Angat Water Transmission Improvement Project
- Bigte- Novaliches Aqueduct No.7
- Umiray Angat Transbasin Rehabilitation Project
- Operation and Maintenance of Angat Dam Auxiliary Turbine No. 4 and 5



### 4. PROTECTION

- Integrated Watershed Management for General Nakar and Ipo Watersheds

## 2 Sewerage and Sanitation



### TARGET SETTING



### STANDARDIZATION OF COMPLIANCE COMPUTATIONS



### COORDINATION WITH LOCAL GOVERNMENT



### POLICY SETTING:

- Combined vs. Separate systems
- Sewerage Technology
- Clean Water Act Compliance
- Clean Up of Interceptors by LGUs



### JOINT PLANNING:

- 3-River Clean Up
- Advocacy



## 3

## Water Distribution Efficiency



**REVIEW TARGETS**



**ADDRESSING ISSUES ON  
WATER DISTRIBUTION**



**INTER-AGENCY  
COORDINATION OF PLANS/  
SYNERGY AND ROW  
ACQUISITION**



**RELIABILITY AND SUSTAINABILITY OF  
WATER DISTRIBUTION AND MEETING  
THE REQUIRED NRW LEVEL**



**DETERMINING ACCOMPLISHMENT  
AND DEVELOPMENT PROGRAMS OF  
BOTH CONCESSIONAIRES ON WATER  
DISTRIBUTION**

## 4 Tariff Rationalization and Business Plan Review

### MAJOR PROGRAM

- Renegotiation of selected CA provisions
- Tighten Annual Project Monitoring System
- Policy Review and Improvement
- Rate Rebasing process review
- Detailed Concessionaire compliance and Business Plan review

### IMPERATIVES

1. Uphold the protection of the public (striking Win-Win balance with private partners)
2. Ensure prudence and efficiency of Concessionaires Business Plan

## 5 Partnership Development



### JOINT STRATEGIC PLANNING WITH CONCESSIONAIRES

- Live Issue Discussion and Openness
- Transparency, Accountability and Fairness (win-win)
- Broad Participation



### INTER-AGENCY PARTNERSHIP AND COOPERATIONS



### ROLES AND RESPONSIBILITIES

- MWSS and Concessionaires
- WRC or Water Body



## 6

## Communications and Knowledge Management



### MWSS IMAGE REBRANDING

- Infrastructure project announcement
- Good fiscal management and partnership
- Organizational Transformation



### STAKEHOLDER MANAGEMENT, COMMUNICATIONS FOR CRITICAL ACTIVITIES AND PROJECTS



### WATER AND WATER RESOURCES ADVOCACY PLAN

- Water Appreciation
- Watershed Management
- Sewerage and Sanitation



## 7 Organizational Excellence



### MWSS RATIONALIZATION PLAN



### LEADERSHIP BY EXAMPLE



### INSTALLATION OF KEY SYSTEM/ PROGRAMS

- Performance Evaluation System
- Financial System and Controls
- Strategic Management Process
- ISO



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# THANK YOU!