

# Experiences of the Philippines in Water Financing Reforms in the Context of IWRM

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Lessons from Implementation in Developing Countries  
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# IWRM in Philippine Laws

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1. **Republic Act No. 4850 (1966) created the Laguna Lake Development Authority (LLDA) as a river basin organization with exclusive jurisdiction over surface waters of the Laguna Lake basin.**

# LAGUNA DE BAY WATERSHED



## LEGEND:

— Rivers

— Sub basin

### Rainfall Station

■ LLDA

● Other Agency

### Landuse

■ Built-up area

■ Man-made areas and swamp

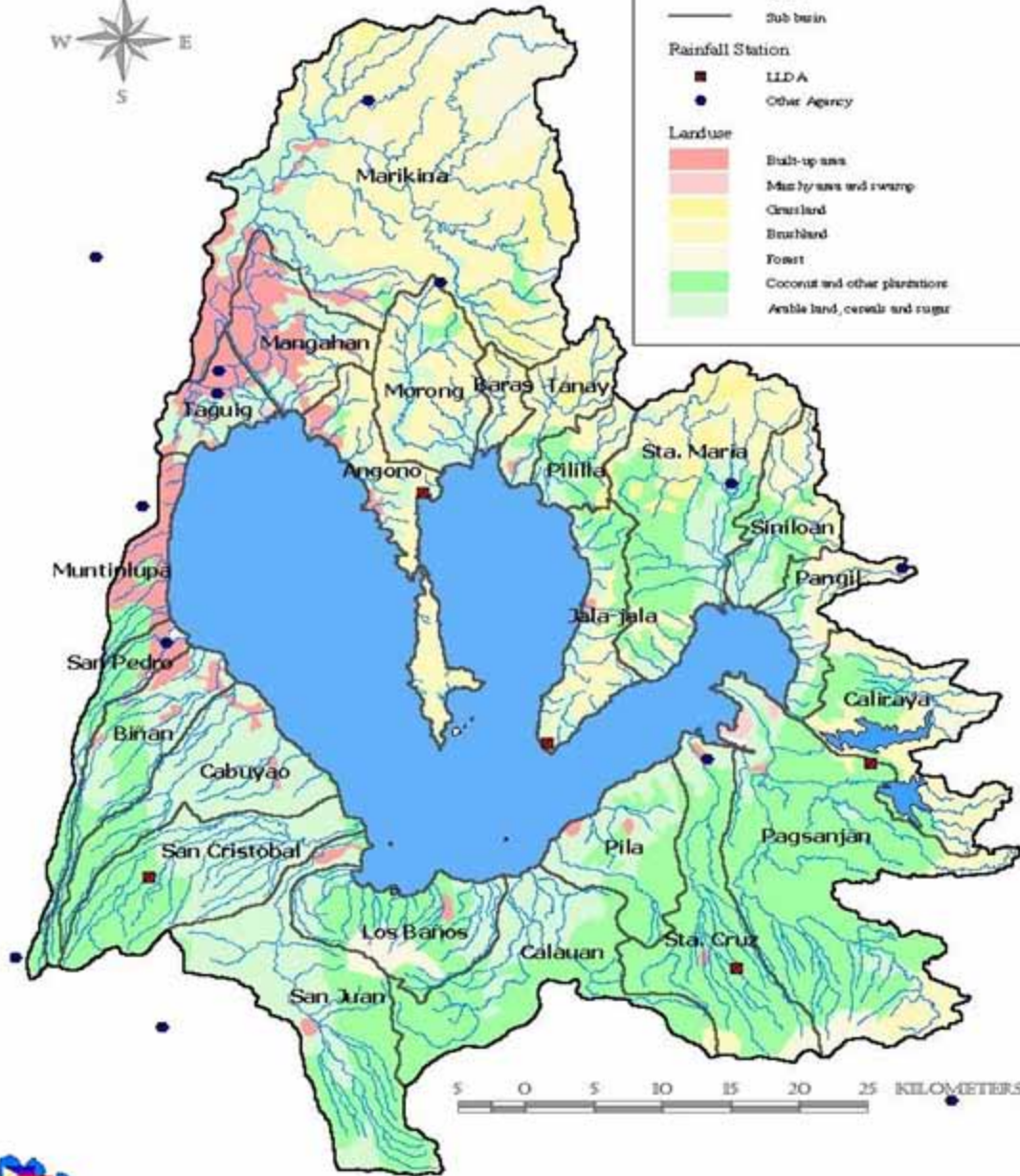
■ Grassland

■ Brushland

■ Forest

■ Coconut and other plantations

■ Arable land, cereals and sugar



0 5 10 15 20 25 KILOMETERS



# IWRM in Philippine Laws

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1. **Republic Act No. 4850 (1966)** created the Laguna Lake Development Authority (LLDA) as a river basin organization with exclusive jurisdiction over surface waters of the Laguna Lake basin.
2. **Presidential Decree No. 198 (1973)** provided for the **creation of water districts by local government units** and created the **Local Water Utilities Administration**.
3. **Presidential Decree No. 424 (1974)** created the **National Water Resources Council (NWRC)**.
4. **Presidential Decree No. 1067 (1976)** or the Water Code of the Philippines **based on rational concepts of integrated and multi-purpose management of water resources**.

# National Water Resources Council

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## Regulatory and Executory Functions:

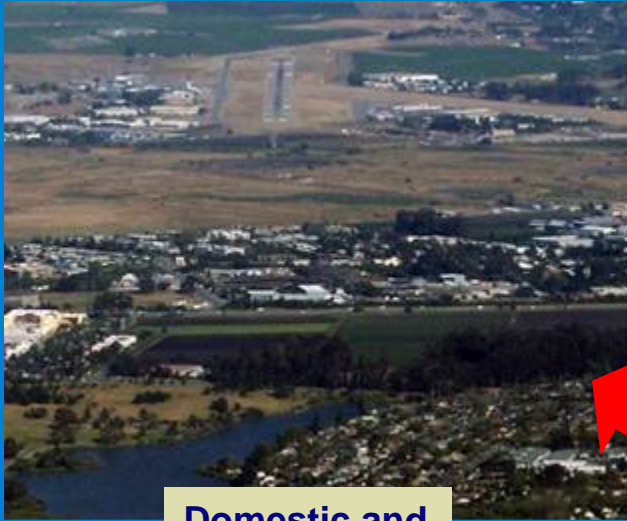
- ❖ **Coordinate and integrate**, on a sound and logical basis, **water resources development activities of the country within the context of national plans and programs for social and economic development**
- ❖ Determine, adjudicate, and **grant water rights** for the appropriation and utilization of **surface and ground water**

# National Water Resources Council

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## Regulatory and Executory Functions:

- ❖ **Undertake river basin survey**, inventory and appraisal of water and related resources and **develop comprehensive basin-wide plans** of storage and control to maximize the **conservation and multi-purpose use of water in the basin**
- ❖ Undertake hydrologic surveys and establish, operate and maintain observation station networks and a **centralized water resources data center** necessary for the scientific survey and appraisal of surface and ground water potentials of the country



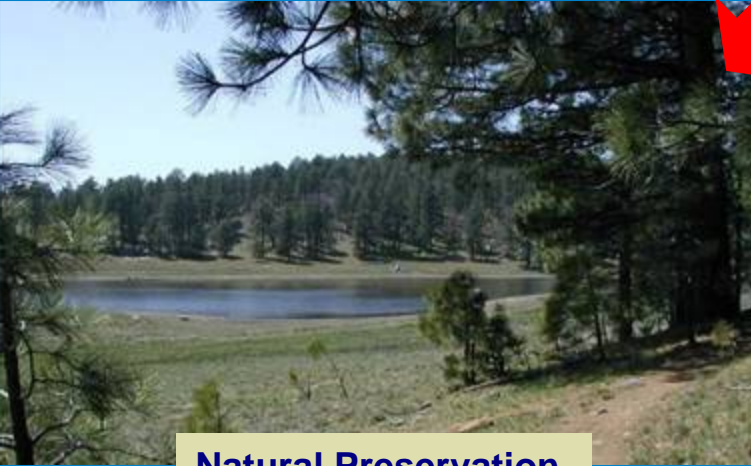
**Domestic and Industrial use**



**Agriculture use**



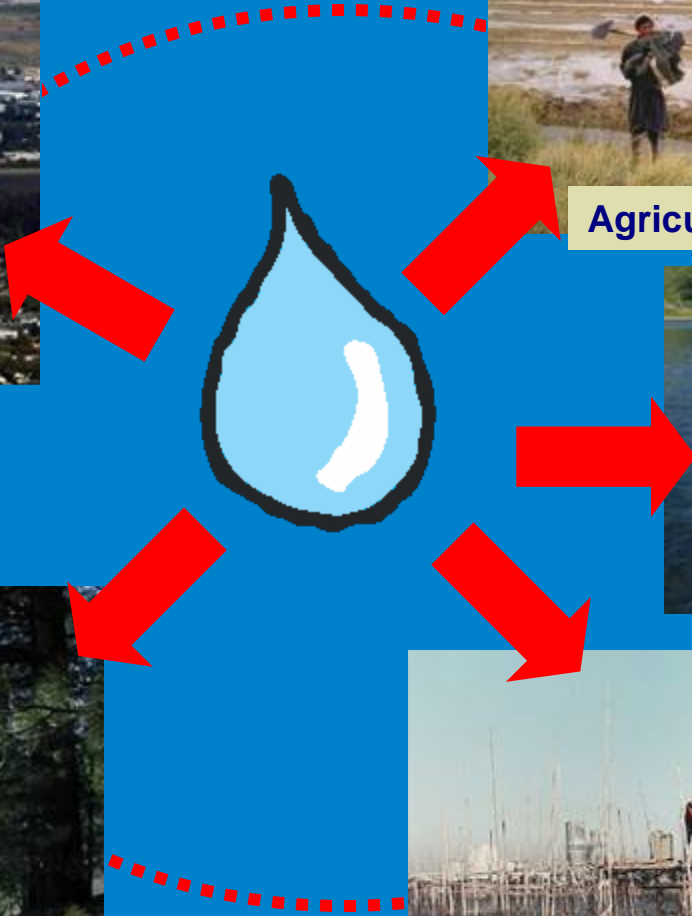
**Recreational use**



**Natural Preservation**



**Fishery use**



# National Water Resources Council

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## Advisory and Recommendatory Functions:

- ❖ Appraise and/or **advise the National Economic and Development Authority (NEDA)** on matters pertaining to water resources development projects and programs
- ❖ **Recommend to NEDA** the adoption of general policies and guidelines and short/long range plans and programs for water resources development

**Note: IWRM approach recognized in Medium Term Philippine Development Plan for 2004-2010.**

# National Water Resources Council

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- Chair :** Department of Public Works and Highways
- Co-Chair:** **National Economic and Development Authority**
- Members:** Department of Agriculture  
National Irrigation Administration  
National Power Corporation  
Metropolitan Waterworks and Sewerage System  
Local Water Utilities Administration  
Department of Health  
Department of Trade and Industry  
Department of Environment and Natural Resources

# Water Code of the Philippines

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Mandated the NWRC to regulate and control, **on behalf of the State**, the utilization, development, conservation and protection of **all water resources** and gave it the following **additional powers**:

- ❖ **Establish minimum stream flows for rivers and streams** and minimum water levels for lakes **for the protection of the environment**, control of pollution, navigation, prevention of salt damage, and general public use
- ❖ Promulgate rules and declare the existence of **control areas for the coordinated development**, protection, and utilization of ground and surface waters
- ❖ Issue rules and regulations for **reservoir operations**

# Water Code of the Philippines

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- ❖ Approve **transfer of water from one river basin to another**
- ❖ Issue **permits for drilling of wells**
- ❖ Impose and **collect reasonable fees or charges for water resources development**
- ❖ **Approve rules and regulations prescribed by other government agencies** pertaining to the utilization, development, control or protection of water resources
- ❖ **Adjudicate all disputes** relating to appropriation, utilization, development, control and protection of water resources

# Economic Regulation by NWRC

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When the Public Service Commission was abolished in 1972, its economic regulatory powers over power and water utilities were transferred to the Board of Power and Waterworks (BPW).

When the BPW itself was abolished by PD 1206 in 1977, its regulatory powers and functions with regard to waterworks were transferred to the NWRC, including the following:

Issue and extend the validity of Certificates of Public Convenience and Certificate of Public Convenience and Necessity;

- ❖ Fix and adjust rates;
- ❖ Set just and reasonable standards and regulations; and
- ❖ **Adjudicate cases brought before it (including appeals from water districts regarding LWUA's review of their tariff rates, per PD 198, as amended).**

# Provincial Water Utilities Act

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- Presidential Decree (PD) 198 promulgated in 1973 authorized the creation of water districts, **on a local option basis**, to operate and maintain reliable and economically viable **water supply and wastewater disposal systems** for the country's population centers.
- The legislative body of any city, municipality or province may form a water district by enacting a resolution.
- Once formed, a water district is **not under the jurisdiction of any political subdivision**. It can be dissolved only by a resolution of its **Board of Directors**.

# Local Water District Law

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- The mayor or governor appoints as **Board members five (5) private citizens** who represent civil society, professional associations, business/commercial/financial organizations, educational institutions, and **women's organizations**.
- **The Board determines, after public hearings, the rates at which it will sell water.** As far as practicable, the rates should generate revenues that will cover installation costs, operating expenses, maintenance and repairs, reasonable surplus for replacement, extension and improvement, and debt servicing.
- Aside from extracting, treating and distributing water, water districts are also expected to undertake **watershed protection** activities.

# Local Water Utilities Administration Law

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- Title III of PD 198 created the Local Water Utilities Administration (LWUA) primarily as a specialized lending institution for the promotion, development and financing of local water utilities.
- Local water utilities defined to include water districts, LGU-run or investor-owned public utilities or cooperative corporations which own or operate a water system serving an urban center.
- The LWUA sets and monitors technical, financial and management standards for them and provides financial and technical assistance and institutional development support.

# Local Water Utilities Administration

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- ❖ Formally organized on September 18, 1973.
- ❖ First 12 water districts (WDs) formed with issuance of their Conditional Certificates of Conformance.
- ❖ In its first 8 years, LWUA secured **foreign loans** from USAID, DANIDA, ADB and WB , totalling over \$155M for over 90 WDs.
- ❖ **By 1992, LWUA's authorized capital stock already fully subscribed. National Government gave annual subsidies until 2002.**
- ❖ By 1997, of the 611 WDs formed, 420 WDs covering 474 cities and towns had availed of loans from LWUA. **Collection ratio had improved to 85%.**

# Local Water Utilities Administration

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- ❖ LWUA able to service its foreign debts but had **limited funds for new projects**. Counterpart funds needed for foreign-assisted projects. **Domestic borrowing cap reached**.
- ❖ As of December 2001, of the 451 WDs with LWUA loans, **20 WDs accounted for 60% of the value of loans availed**. These 20 WDs had loans of at least Php100M. **Two (2) categorized as Very Large; 7 Large; 7 Big; 4 Medium**.
- ❖ **Average service coverage of Big to Very Large WDs is only 65%**. (70% for Davao City, 40% for Cebu City)
- ❖ **85% of WDs have less than 10,000 connections**, of which 63% have average 1,500 connections.
- ❖ **LWUA not providing support to other water service providers**.

# Executive Order 279

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## Objectives:

- **Improvement of investor confidence** in the water supply and sewerage (WSS) sector
- **Rationalization in the allocation of scarce financial resources in the WSS sector through classification and graduation of water service providers (WSPs)** including water districts and local governments
- **Freedom of choice of WSPs in sourcing financing**
- **Increase in the participation of local government units (LGUs) as well as government and private financial institutions in the financing of the WSS sector**

# Executive Order 279

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## Objectives:

- **Grant of incentives for improvement of service and financial sustainability of WSPs and their graduation to creditworthy status**
- **Encouragement of initiatives aimed at self-sufficiency of WSPs** including amalgamation, private sector participation, cost-recovery tariffs, and resource pooling
- **Education of consumers towards treating water as a scarce economic good**
- **Establishment of an independent economic regulator for the WSS sector**

# Executive Order 279

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## Institutional Roles:

**Responsibility of LGUs:** In line with 1991 Local Government Code, LGUs are financially and operationally responsible for the WSPs within their respective jurisdictions, as a general policy.

**Role of GFIs:** GFIs shall strengthen their skills base and develop lending programs specially tailored to the needs of the WSS sector.

**Role of LWUA:** LWUA to streamline its waiver procedures and provide incentives for graduation. LWUA to rationalize its organizational structure and operations.

# Executive Order 279

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## **Rationalization of LWUA's organizational structure:**

- **Water Development Group (WDG)**
  - classification and graduation plans of WSPs
  - cost recovery tariffs and possible amalgamation
  - private sector participation and LGU cooperation
- **Water Development Financier (WDF)**
  - lending to semi, pre and non-creditworthy WSPs based on sound development banking principles
  - collection and separate accounting of previous loans
- **Technical Assistance Group (TAG)**
  - project-related TA to GFIs and WSPs

# Executive Order 279

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## Sources of Financing by type of WSP:

- ❖ **Creditworthy** – financially self-sustaining and capable of accessing financing from GFIs and/or PFIs at commercial lending rates
- ❖ **Semi-creditworthy** – with demonstrated ability to achieve creditworthiness in the short-term and eligible for concessional debt financing from LWUA-WDF, as well as GFIs and PFIs when possible
- ❖ **Pre-creditworthy** – not likely to become creditworthy in the medium-term due to performance issues but can demonstrate potential for creditworthiness in the long-term; eligible to source grants from donors and deep concessional financing from LWUA-WDF

# Executive Order 279

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## Sources of Financing by type of WSP:

- ❖ **Non-creditworthy** – with potential to reach pre-creditworthy status in the medium-term; eligible for financing under LWUA-WDF. LGUs encouraged to provide financial and operational support for them. Dept. of Interior and Local Gov't and Dept. of Finance to provide the necessary technical and financial support within their respective mandates.
- ❖ **WSPs, including eligible WDs, can access financing from government and private financial institutions and LGUs, whenever possible.**

# Criteria/Indicators for Classifying WSPs

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## Financial Indicators:

Current Ratio	20%
Debt-Service Ratio	20%
Profit Margin Ratio	20%
Debt/Equity Ratio	5%
Cash Flow Ratio	10%

## Operational Indicators:

Collection Efficiency	10%
Non-Revenue Water	10%
Service Connection/Staff	5%

**Note:** Classification of WSPs is merely an indicator of eligibility for various sources of financing and not an outright guarantee of actual financing from the designated source.

# Classification of Water Districts

<b>Classification</b>	<b>Total</b>	<b>Small</b>	<b>Average</b>	<b>Medium</b>	<b>Big</b>	<b>Large</b>	<b>Very Large</b>
<b>Creditworthy</b>	51	11	3	18	15	3	1
<b>Semi-creditworthy</b>	151	75	19	29	15	10	3
<b>Pre-creditworthy</b>	55	39	8	4	4	0	0
<b>Non-creditworthy</b>	23	19	2	1	1	0	0
<b>TOTAL NO.</b>	<b>280</b>	<b>144</b>	<b>32</b>	<b>52</b>	<b>35</b>	<b>13</b>	<b>4</b>

# Classification of Water Districts (Percentage Distribution)

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Classification	Total	Small	Average	Medium	Big	Large	Very Large
Creditworthy	18	8	9	34	43	23	25
Semi-creditworthy	54	52	60	56	43	77	75
Pre-creditworthy	20	27	25	8	11	0	0
Non-creditworthy	8	13	6	2	3	0	0
<b>TOTAL NO.</b>	<b>280</b>	<b>144</b>	<b>32</b>	<b>52</b>	<b>35</b>	<b>13</b>	<b>4</b>

# Loans and Grants to LWUA after EO 279

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- ❖ **Loan of Euros 10.2 M from KfW for Phase 3 of the Provincial Towns Water Supply and Sanitation Programme:** two WDs are semi-creditworthy, one is creditworthy, one is new and not yet classified.
- ❖ **Small Water Districts Improvement Project of Japan International Cooperation Agency – P5M each for 20 small/less creditworthy WDs for personnel training and facilities improvement**
- ❖ **Efficiency Improvement Program being piloted by the United States Agency for International Development in one large, SCW WD and one big PCW WD.**

# National Government Support for LWUA

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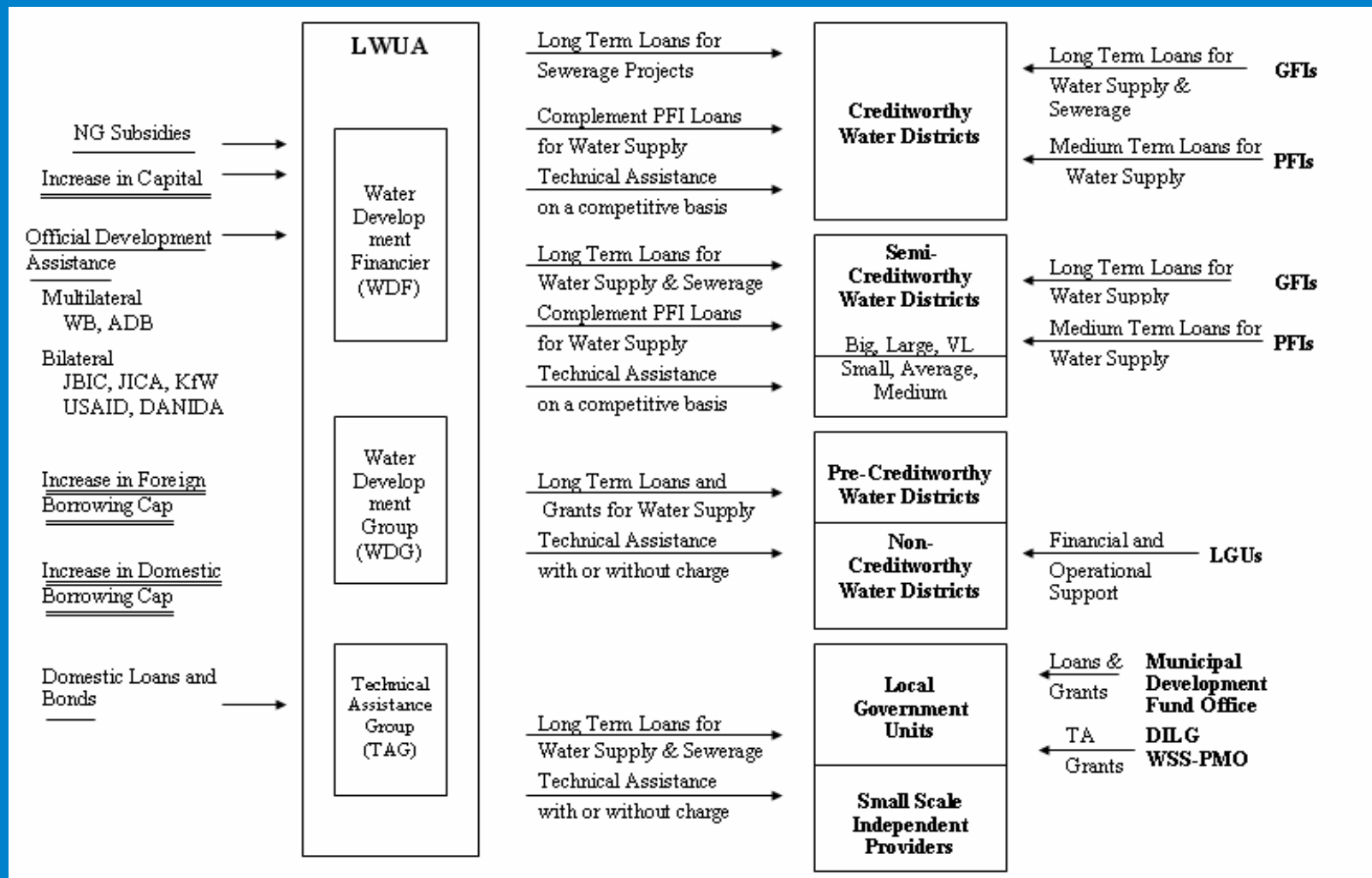
- ❖ Feasibility Studies Fund (\$3.1M)
- ❖ Efficiency Improvement Programs (\$3.1 M)
- ❖ Water Supply Projects in Autonomous Region of Muslim Mindanao (\$1.25 M)
- ❖ Support for increase in capitalization of LWUA
- ❖ Support for increase in foreign and domestic borrowing caps

# Proposed Projects of LWUA

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- ❖ **Support for Regional and Local Water Supply**
  - improve performance of utilities esp. WDs
  - implement LWUA restructuring
  - strengthen economic regulation of NWRB
  - leverage subsidies to expand rural water supply
- ❖ **Water Supply for Non-Operational WDs**
- ❖ **Water Supply for the Waterless within WDs**
- ❖ **Provincial Urban Sewerage and Septage Management**

# Financing Framework for Water Districts and Other Water Supply Providers



# Loans from Government and Private Financial Institutions

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## Creditworthy WDs

- Silang WD availed of a P160.65 million loan from a PFI guaranteed by the LGU Guarantee Corporation (LGUGC).

## Semi-creditworthy WDs

- Metro Cebu WD obtained a P1.25 billion loan from Development Bank of the Philippines (DBP) as part of refinancing agreement between DBP and LWUA.
- Metro Iloilo WD obtained a P140 million loan from DBP under the Municipal Water Loan Financing Initiative funded by the Japan Bank for International Cooperation, as well as a P39.29 million loan from PNB guaranteed by LGUGC and USAID.
- Laguna WD being piloted under USAID's Efficiency Improvement Program (EIP) borrowed P85 million from a PFI last Dec. 2007, also guaranteed by LGUGC.
- Two other WDs got loans from PFIs guaranteed by LGUGC: Calamba WD for P34 million and Legazpi City WD P105 million.

# LGU Guarantee Corporation

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- LGUGC guarantees bank loans and bonds of LGUs, water districts and electric cooperatives
- 16 LGU bonds amounting to P2.814 M guaranteed by LGUGC since 1999
- LGUGC owned by Bankers Association of the Philippines (38%), DBP (37%) and Asian Development Bank (25%)
- USAID provides 30% reinsurance cover to enrolled portfolio of LGUGC
- LGUGC has 16 accredited financial institutions (AFIs) including GFIs, PFIs and private non-bank FIs
- MOA between LWUA and LGU Guarantee Corporation signed in June 2007
- AFIs can lend up to 90% and LWUA lends balance
- LWUA can prepare or review Feasibility Study and perform or monitor Construction Supervision

# Other Financing Options

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- ❖ LWUA to co-finance and/or supplement loans of PFIs to WDs with concessional and long-term ODA
- ❖ LWUA to borrow from PFIs and relend to WDs and other WSPs
- ❖ LWUA to securitize its existing loan portfolio and lend proceeds to WDs and other WSPs
- ❖ Bond flotations by WDs guaranteed by LGUGC
- ❖ Bond flotations by LWUA guaranteed by DOF
- ❖ Use ODA to create reserve funds for bond flotations
- ❖ LWUA to use ODA to finance sewerage projects

# Lack of Effective Demand for Loans

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- ❖ Water districts need to make more investments to increase service coverage, improve water supply services, treat wastewater, reforest, etc. but do not have much incentive to do so or do not face severe penalties if they don't because of weak economic and resource regulatory regimes.
- ❖ In previous financing programs of LWUA, water districts back out 20 to 30% of the time.
- ❖ Other water service providers also have low appetite to borrow. LGUs wait for grants or pork barrel funds.

# Assessment of NWRB

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- ❖ No regional/field offices despite nationwide coverage
- ❖ Central office has very limited staff and budget
- ❖ Board members are representatives of water users
- ❖ Unable to fully carry out its many mandates

# Executive Order 123

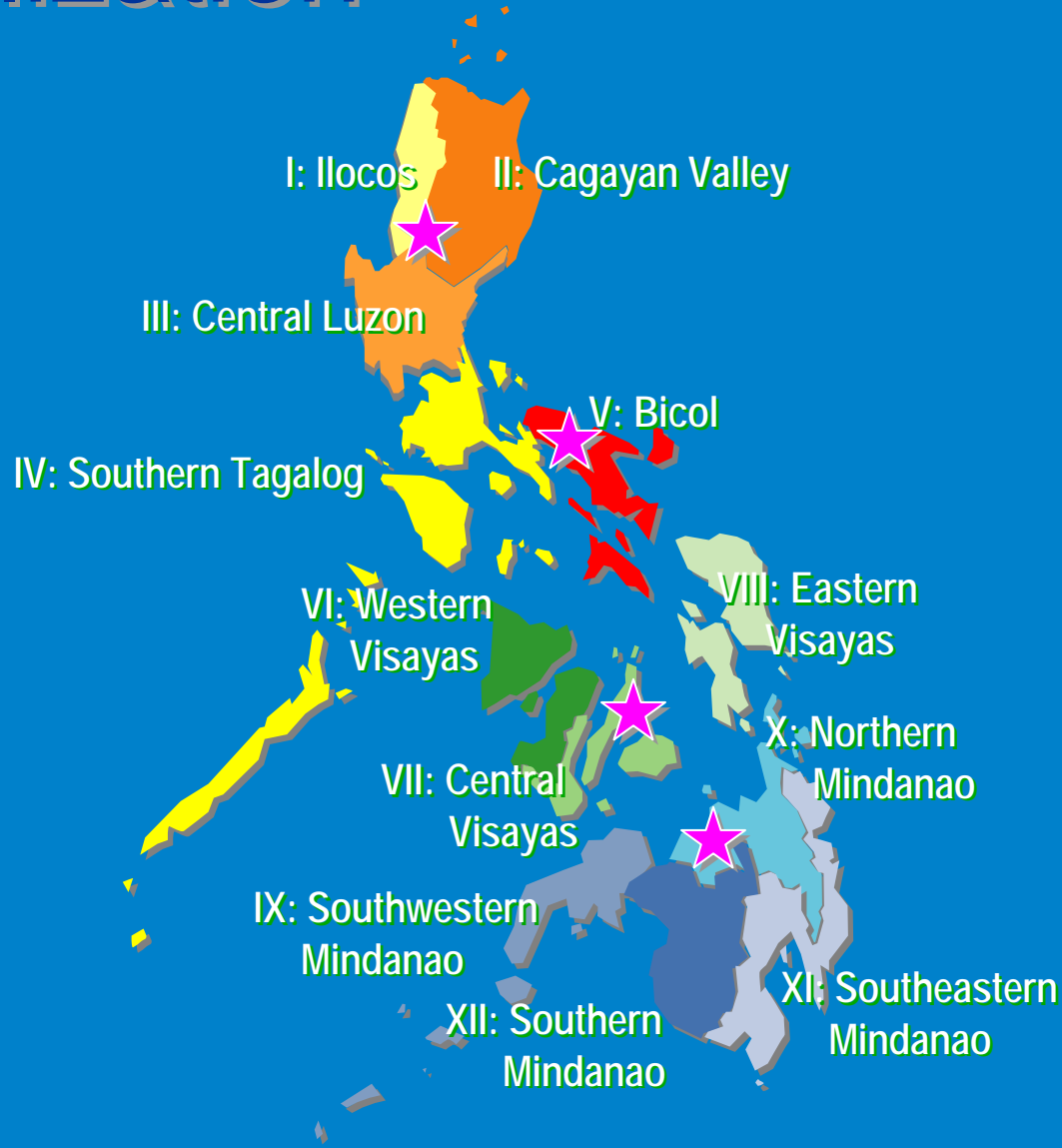
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Issued on September 12, 2002 and mandated the ff.:

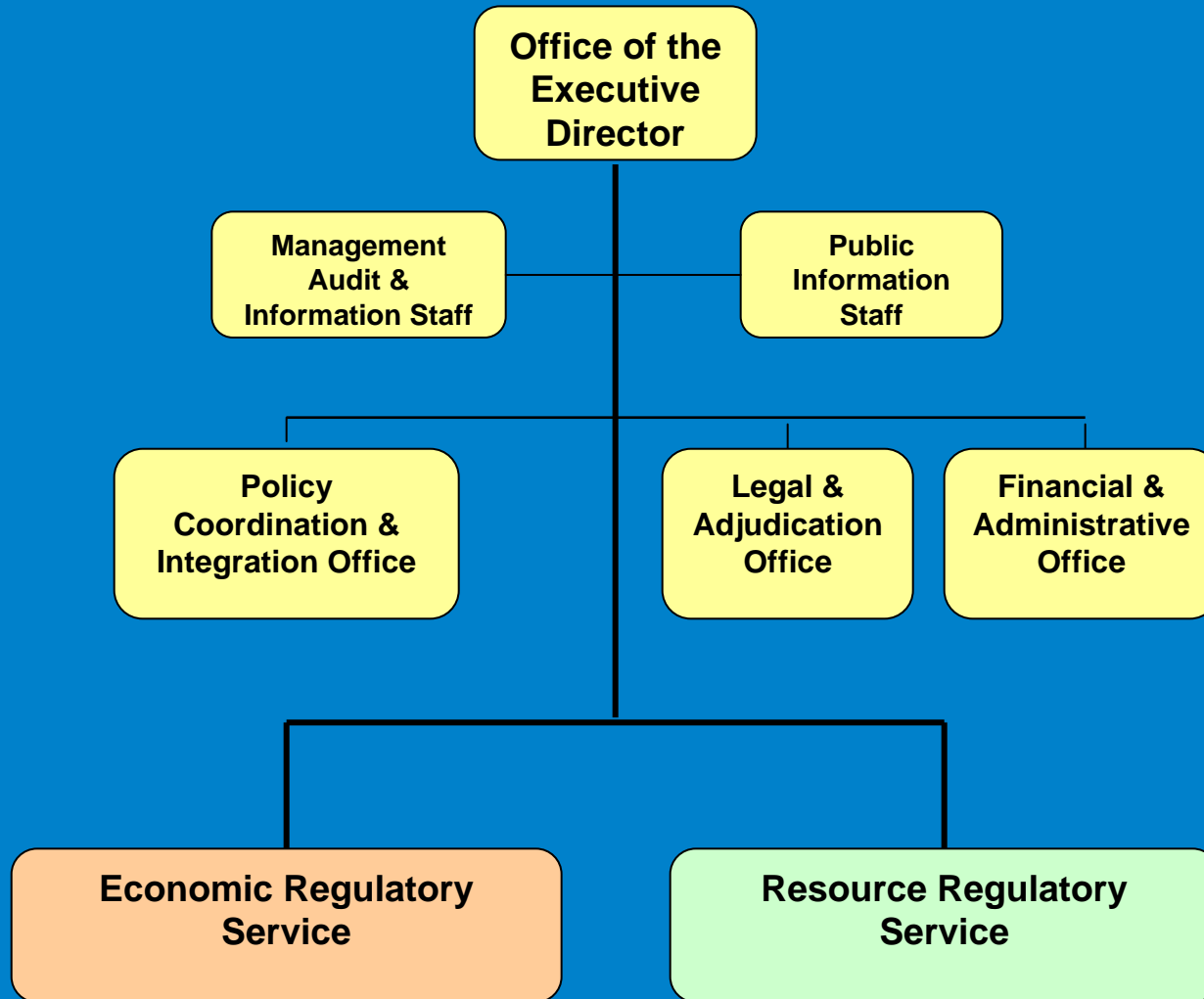
- ✓ Reconstitution of the NWRB;
- ✓ NWRB to review/revise IRR of the Water Code;
- ✓ NWRB to formulate revised organizational plan;
- ❖ Transfer of the NWRB to OP and then to DENR as a bureau for purposes of administrative control and supervision; and
- ❖ Transfer of rate review power of LWUA over water districts to NWRB.



# Proposed NWRB Rationalization



# Proposed NWRB Rationalization



# The Water Balancing Act

## Supply

- Quantity (Natural Scarcity, Groundwater Depletion)
- Quality Degradation
- Cost of Options

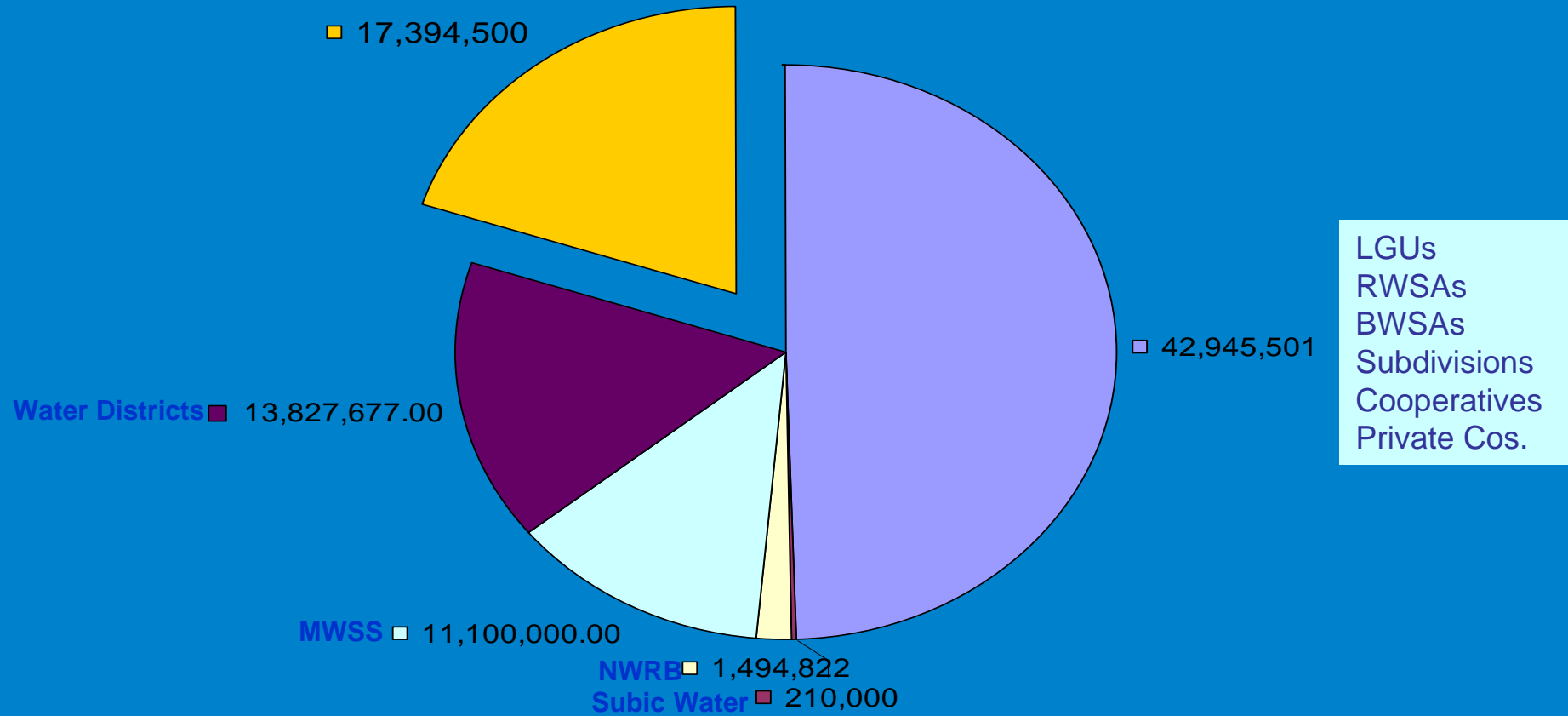
## Demand

- Increasing in all sectors
- Inefficient use

IWRM

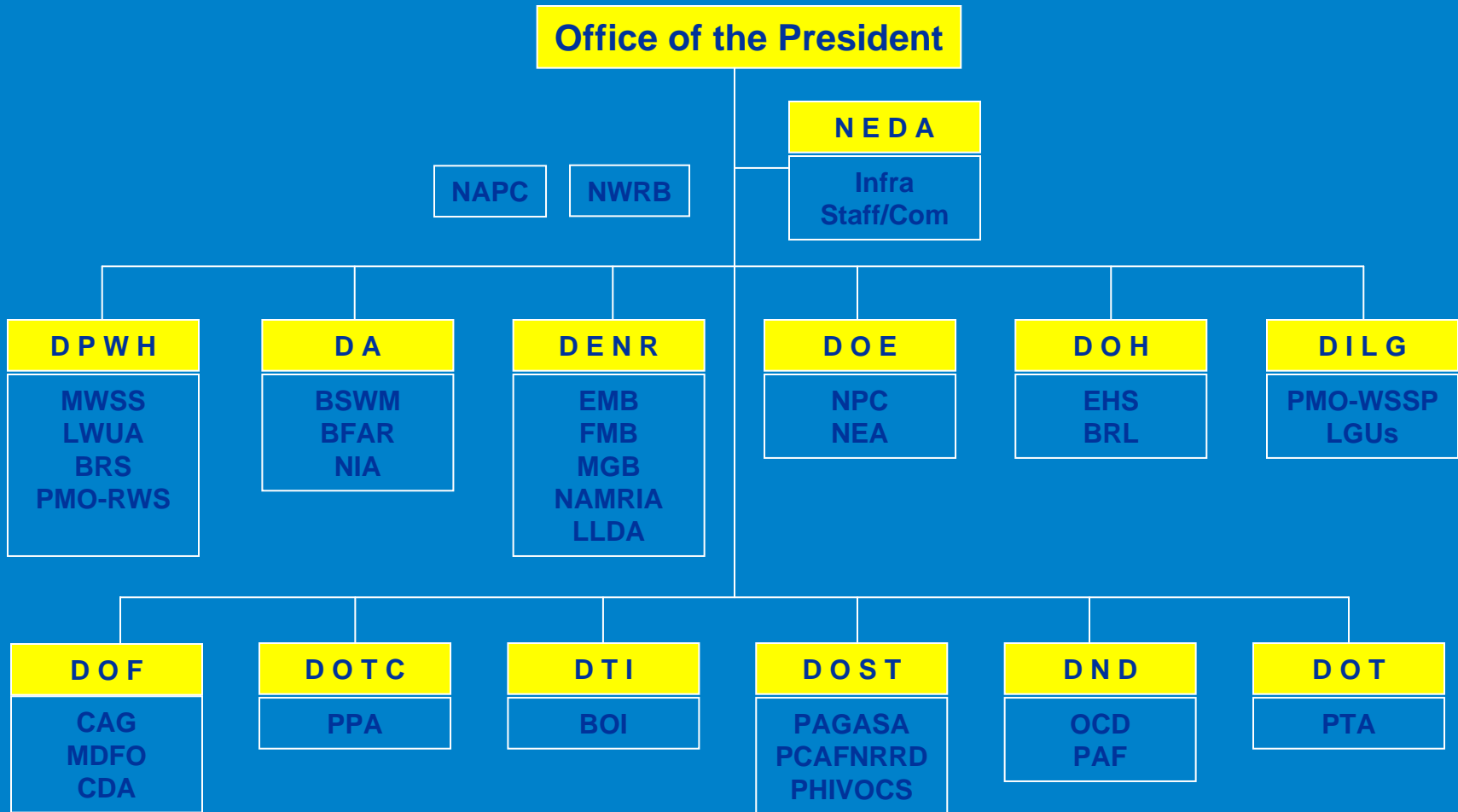
# State of Economic Regulation

Without access to safe  
and sustainable water  
supply



Source: National Water Resources Board

# Water Related Agencies



# Water Supply Sector Roadmap

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- **A multi-stakeholder collaborative effort towards an action plan** that integrates the operational strategies of the major water supply agencies and funding institutions, local governments and water service providers in implementing their respective strategic roles in the water supply sector
- **Led by the National Economic and Development Authority and National Water Resources Board**
- Members include representatives from the Departments of Finance, Interior and Local Government, Environment and Natural Resources, Public Works and Highways, LWUA, local governments and NGO's

# Water Supply Sector Roadmap

GOAL

**What results are needed?**

Analysis of previous and recent sector reform initiatives

**What can verify achievement of objectives?**

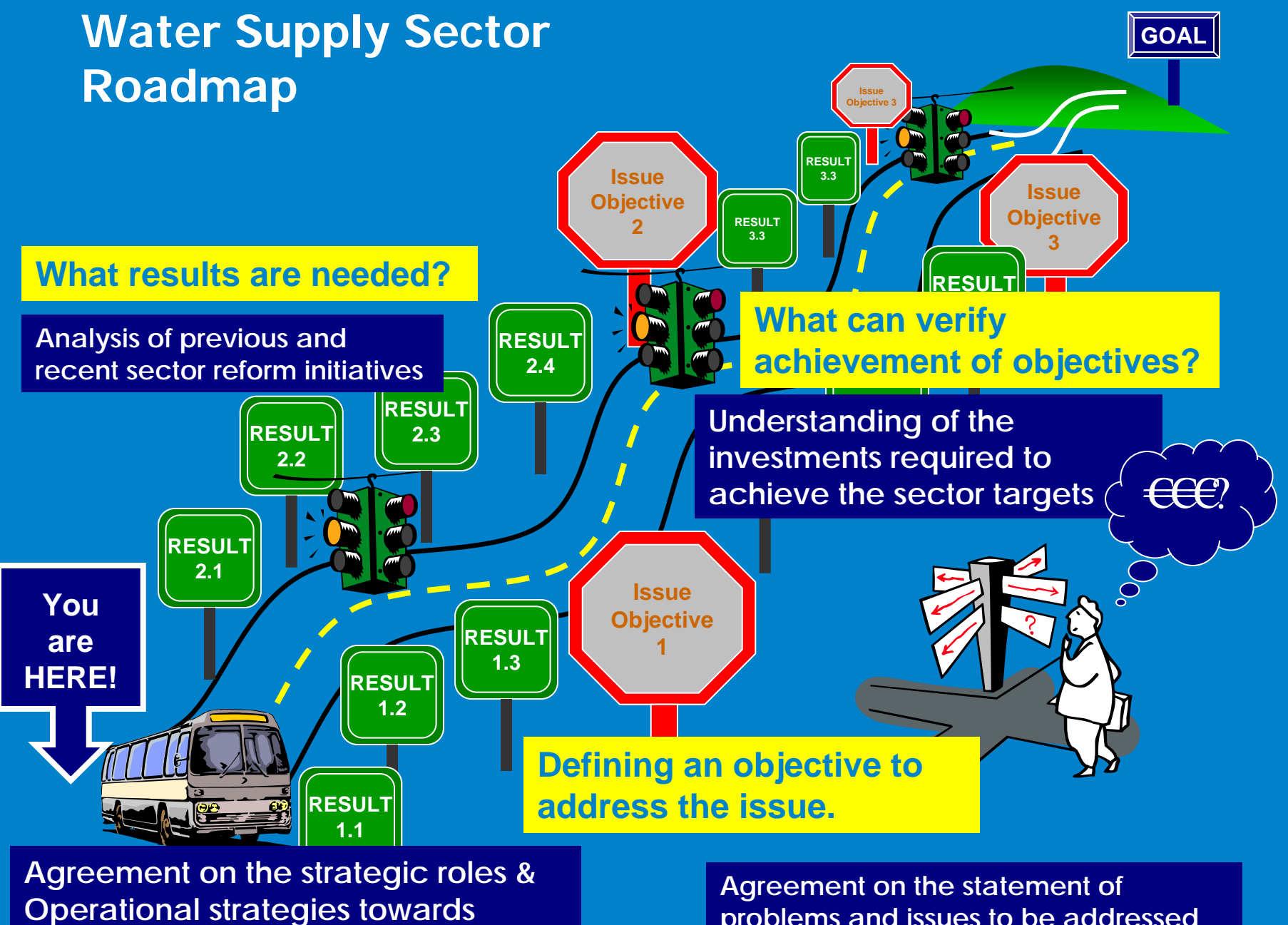
Understanding of the investments required to achieve the sector targets €€€?

**Defining an objective to address the issue.**

**You are HERE!**

Agreement on the strategic roles & Operational strategies towards implementing the agreed roles

Agreement on the statement of problems and issues to be addressed



# Water Supply Sector Roadmap

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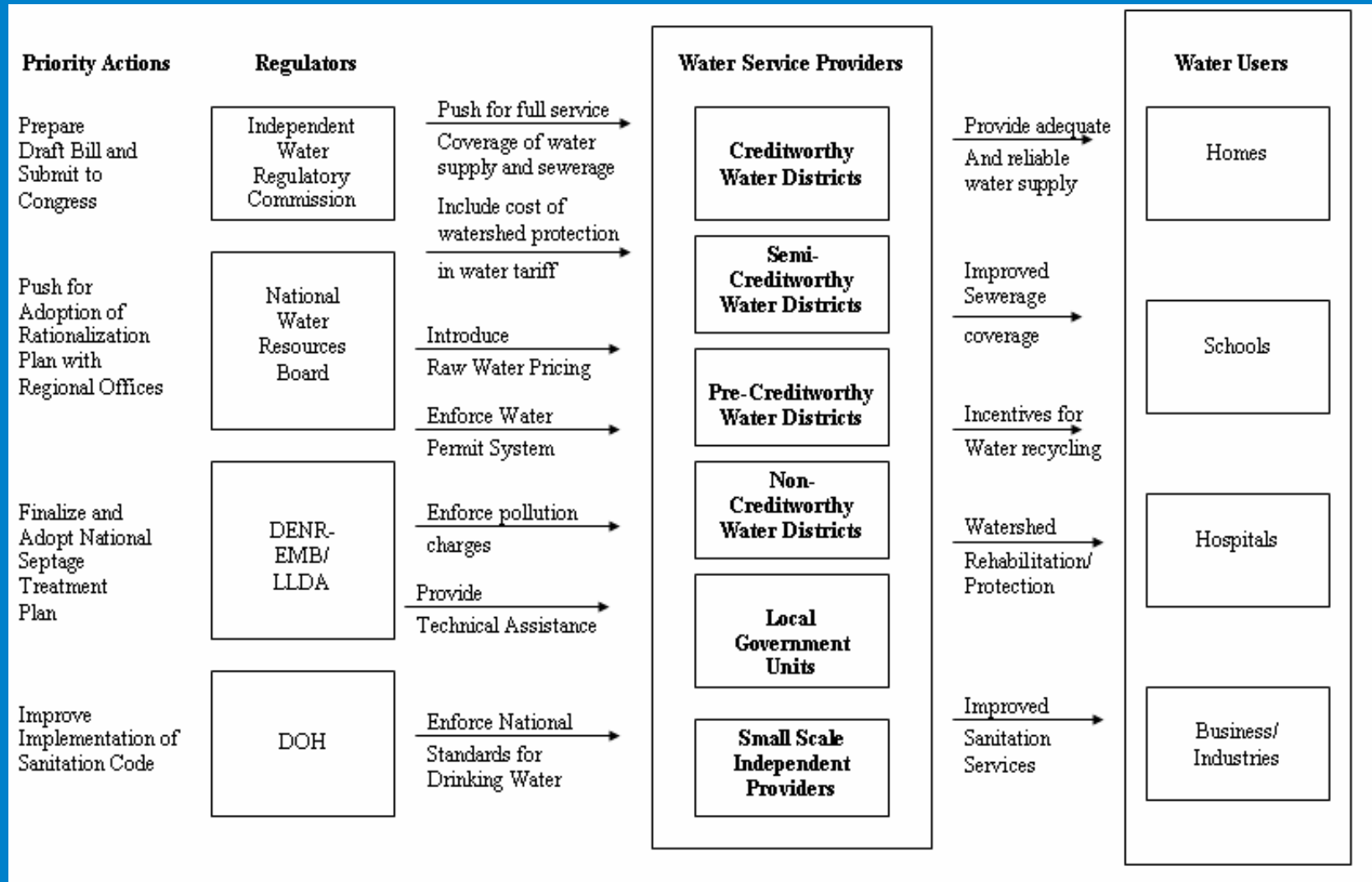
- **Policy and Institutional Reforms** to achieve the ff. objectives:
  - Sector planning and monitoring at local and national levels
  - Effective resource and economic regulation in a decentralized context
  - Sector-wide availability of technical assistance and financing options
  - Viable and creditworthy water service providers
  - Environmentally sustainable and equitable access to water supply
- **Capacity Building**
  - Local governments and communities
  - Water service providers and financing institutions
  - National government agencies and regulators
- **Partnerships**
  - Local level
  - National level
  - Regional level
  - Global level

# Water Supply Sector Roadmap

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- **Financing investments** in the ff.:
  - Water supply and sanitation
  - Water source and watershed protection including reforestation, solid waste management and monitoring of chemical pollution
  - Wastewater treatment and sewerage systems
  - Capacity building
  - Regulatory regime
  - Data gathering, pooling and analysis
- **Economic Instruments**
  - Including the cost of water source and watershed protection in water tariffs
  - Payments for environmental services
  - Raw water pricing
  - Pollution charges

# Proposed Regulatory Framework for Water Supply and Sewerage Sector



# Dublin Principle No. 1

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# Dublin Principle No. 2

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# Dublin Principle No. 3



# Dublin Principle No. 4



# Water for All Always

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