

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

SIXTEENTH CONGRESS
Second Regular Session

HOUSE BILL NO. **4877**



**INTRODUCED BY HONORABLE GAVINI "APOL" PANCHO,
HONORABLE MA. VICTORIA R. SY-ALVARADO, HONORABLE JOSELITO
"JONJON" R. MENDOZA, HONORABLE LINABELLE RUTH R. VILLARICA,
AND HONORABLE ARTURO B. ROBES**

EXPLANATORY NOTE

The Angat River is the largest river located in the province of Bulacan and lies 40 kilometers north of Manila. The river flows westerly beginning in the Sierra Madre mountains through the lowland plains of Bulacan passing through 11 of its municipalities- Angat, Baliwag, Bustos, Dona Remedios Trinidad, Norzagaray, Pulilan, Calumpit, San Rafael, Plaridel, Paombong and Hagonoy.

The Angat River is the largest and most important source of water for our region. As the main municipal water source for Metro Manila's 12 million residents, supplier of irrigation water to 26,791 hectares of farmland in Pampanga and Bulacan provinces, flood control for downstream municipalities and provider of 10% of the nation's hydroelectricity, the Angat River Basin is of prime socioeconomic importance.

In 1968, the Angat Reservoir and Dam began operations. From its location in San Lorenzo, Norzagaray, Bulacan, this facility serves multiple functions:

1. The domestic and industrial water requirements of Metro Manila residents;
2. A Hydroelectric power source to feed the Luzon grid;
3. Irrigation for over 31,000 hectares of farmland in Pampanga and Bulacan;
4. Flood control for nearby towns and villages.

Currently there is an ongoing initiative to rehabilitate the aging Angat Dam and ensure not only its efficient functioning but also the safety and welfare of the residents in the barangays adjacent to it in times of earthquakes and other environmental threats. This initiative however, will not help increase the active capacity of the dam nor will it help address growing water and power demands of the public that it serves. Much like a house that has been refurbished and remodeled, it only improves the comfort provide by the residence but does not effectively increase its capacity to hold more residents.

From the Angat Dam reservoir, a set amount of water (measured in Million Liters per Day or MLD) is allocated to MWSS for use in Metro Manila, the NIA to

supply irrigation, and the NAPOCOR for hydropower production as provided for in the Philippine Water Code (NWRB 1976). These water rights can be broken down as follows:

1. MWSS Domestic --- 31 cm³/s/year – 97% of Metro Manila's drinking water
2. NIA --- 36 cm³/s/year - Irrigation for 26,791 hectares of farmland
DENR -- 2 cm³/s Minimum Stream Inflow – for environmental protection
3. NAPACOR --- 0 cm³/s Hydroelectricity generation

According to the National Irrigation Administration (NIA), the Manila Waterworks and Sewerage Board (MWSS) and the National Power Corporation (NPC), future water requirements for domestic, commercial and industrial purposes on Luzon Island show remarkable increases.

The challenge of competing uses and over extraction in the Angat River Basin has resulted in the dilemma arising from multiple individuals acting independently in their own self-interest in the use of a finite, common resource. Compounding the issue are the challenges of climate change, longer droughts and intense weather events, increased water demand due to rural to urban migration into Metro Manila, projected doubling of population in Bulacan Province in the next decade, increased industrialization and increased demand for hydroelectricity.

The rapid increases in population, especially in the urban areas of Luzon, as well as growing industrialization, have severely impacted the country's water resources. Metro Manila's water demand alone is at about 5000 million liters per day (MLD). According to a World Bank Report future demand is estimated to reach at least 8000 MLD if not more by 2025. At an active capacity of 5962 MLD, the Angat Dam cannot meet this demand and is thus expected to have a water shortfall of as high as 50 percent.

This dependence on the Angat River as a major source of water for the country's economic centre is also a growing concern for the communities of Pampanga and Bulacan, where the Angat River flows. With the improvement of transport corridors towards the north, industrialization in both provinces has been significantly accelerated together with the population, brought about by migration and transient employment. These developments have similarly increased the demand for water supply in these provinces.

Sadly however, although the Angat River is geographically located in Bulacan, its residents do not possess water rights for domestic or municipal uses and rely solely on groundwater resources. In addition, as stated in the Philippine Water Code and 'rule curve' policy for Angat Reservoir, Metro Manila's domestic use has priority over all other uses during emergencies and water shortages.

These have resulted in severe losses for the government and in the lawful compensation to affected sectors as Bulacan residents have also been denied their benefits resulting from the one (1) percent share of the annual gross sales of the corporate entities given the right to utilize, exploit and develop the water resource of the Angat River. The amounts that could have been derived from this provision of the Local Government Code identified in Section 291, could have been put to effective

use not only for funding developmental programs and improved basic services, but similarly for the mitigation of calamities like the Ondoy, Pedring, Habagat and Santi that severely affected the residents of the province in the past years.

Given this, the proponents of this bill have therefore sought solace in our Constitution to help address the urgency and gravity of these challenges.

As provided in our Constitution all waters belong to the State and as such cannot be the subject to acquisitive prescription. Likewise the State may allow the use or development of waters by administrative concession for the following purpose:

- 1) Use of water for municipal and city purposes for supplying the water requirements of the general public.
- 2) Use of water for livestock raising and irrigation for producing agricultural crops.
- 3) Use of water for power generation for producing electrical or mechanical power.
- 4) Use of water for industrial purposes in factories, industrial plants and mines, including the use of water as an ingredient of a finished product.

Preference in the use and development of our waters will consider current usages and be responsive to the changing needs of the country. Corollary to this, the utilization, exploitation, development, conservation and protection of water resources shall be subject to the control and regulation of the government through assigned agencies.

The Constitution similarly declares the state's obligation to protect and promote the rights of the people to health, a balanced and healthful ecology and instill health consciousness among them. In doing so the State shall pursue a policy of sustainable development, balancing progress, the protection of the environment, and the health and welfare of its people. The State shall also strive to promote a comprehensive system of environmental planning which seeks to conserve, rehabilitative and develop the physical environment and natural resources of the nation that translates into physical and spatial considerations policies on land capability, urbanization, agricultural development and natural resources development.

With the current changes in global weather patterns, at times there is persistent drought and profuse rains and floods, on the other extreme, resulting in acute water shortages for domestic, livestock and agricultural purposes in one hand and soil degradation due to erosion on the other hand. The need to harness rain water for domestic use and agricultural purposes continues to be very important now as it used to be before the development of ground water exploitation.

The proponents likewise unequivocally adhere to the policy of the State to "ensure that the poorer sectors of society have equitable access to resources, income opportunities, basic and support services and infrastructure".

Supporting this is Art. 31 of Presidential Decree No. 1067 otherwise known as "The Water Code of the Philippines" which states that: "Preference in the development of water resources shall consider security of the State, multiple use, beneficial effects, adverse effects and cost of development" and the proper implementation of Section 291 of the Local Government Code which provides that "Local government units shall have a share based on the preceding fiscal year from the proceeds derived by any government agency or government-owned or controlled corporation engaged in the utilization and development of the national wealth based on the following formula whichever will produce a higher share for the local government unit:

- 1) One percent (1%) of the gross sales or receipts of the preceding calendar year; or
- 2) Forty percent (40%) of the mining taxes, royalties, forestry and fishery charges and such other taxes, fees or charges, including related surcharges, interests, or fines the government agency

Towards this end, the proponents submit this bill for the construction of an additional dam in Bayabas, Dona Remedios Trinidad, Bulacan, and address the following imperative issues:

1. To provide new infrastructure to service the burgeoning demand for water and electricity in Pampanga, Bulacan and the National Capital Region;
2. To promote the effective, efficient and transparent collection the one (1) percent share of the annual gross sales of the corporate entities given the right to utilize, exploit and develop the water resource of the Angat River as provided under Section 291 of the Local Government Code; and
3. To guarantee that the people of Bulacan, particularly those that have been greatly affected and remain vulnerable to floods and calamities, will have equitable access to resources, income opportunities, basic and support services and infrastructure.

Aside from flood control and the provision of a more reliable and higher quality water supply for irrigation, domestic and industrial use, the additional dam will also reduce pressure on uncleared forest lands, intact wildlife habitat and marginal agricultural land as well as properly utilize excess rain water flowing down from the mountains and other elevated areas through the reservoir drawdown area. The additional dam will also help solve other problems of the communities it will serve through the generation of employment opportunities, food security for an ever growing population, protection from floods and droughts, and the generation of the cleanest and least expensive form of energy, namely hydropower.

Moreover, the additional dam can help double the revenues of the MWSS and NIA thereby providing ready funding future sustainment and improvement of the project. Given this strategic approach, the amount necessary to carry out the provisions of this Act shall be charged against the appropriation of the MWSS, the

NIA and the NAPOCOR. Thereafter, such sums as may be necessary for the operation and maintenance of the additional dam shall be included in the allocations of the concerned agencies in the General Appropriations Act (GAA).

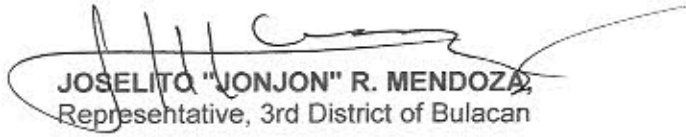
With this purpose in mind, the immediate approval of this bill is strongly requested.



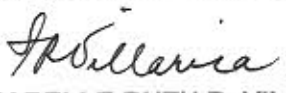
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**AN ACT FOR THE CONSTRUCTION OF AN ADDITIONAL DAM IN BAYABAS,
DONA REMEDIOS TRINIDAD BULACAN TO AUGMENT THE ACTIVE CAPACITY
OF THE ANGAT DAM, AND FOR OTHER PURPOSES THEREOF**

*Be it enacted by the Senate and the House of Representatives in Congress of the
Philippines assembled:*

SECTION 1. *Short Title.* --- *This Act shall be known as "Dona Remedios
Trinidad Bulacan Dam Project Act of 2014".*

SECTION 2. *Declaration of Principles.* *This Act is governed by the following
principles:*

- (a) All waters belong to the State.
- (b) All waters that belong to the State cannot be the subject to acquisitive prescription.
- (c) The State may allow the use or development of waters by administrative concession for the following purpose:
 - 1) Use of water for municipal and city purposes for supplying the water requirements of the general public.
 - 2) Use of water for livestock raising and irrigation for producing agricultural crops.
 - 3) Use of water for power generation for producing electrical or mechanical power.
 - 4) Use of water for industrial purposes in factories, industrial plants and mines, including the use of water as an ingredient of a finished product.

(d) The utilization, exploitation, development, conservation and protection of water resources shall be subject to the control and regulation of the government through the its assigned agencies.

(e) Preference in the use and development of waters shall consider current usages and be responsive to the changing needs of the country.

SECTION 3. Declaration of Policy.

(a) It is hereby declared the policy of the State to protect and promote the rights of the people to health, a balanced and healthful ecology and instill health consciousness among them.

(b) The State shall pursue a policy of sustainable development, balancing progress, the protection of the environment, and the health and welfare of its people.

(c) The State shall promote a comprehensive system of environmental planning which seeks to conserve, rehabilitative and develop the physical environment and natural resources of the nation that translates into physical and spatial considerations policies on land capability, urbanization, agricultural development and natural resources development.

(d) The State shall ensure that the poorer sectors of society have equitable access to resources, income opportunities, basic and support services and infrastructure.

(e) The State shall pursue the implementation of Art. 31 of Presidential Decree No. 1067 otherwise known as "The Water Code of the Philippines" which states that: "Preference in the development of water resources shall consider security of the State, multiple use, beneficial effects, adverse effects and cost of development".

(f) The State shall likewise pursue the proper implementation of Section 291 of the Local Government Code which provides that "Local government units shall have a share based on the preceding fiscal year from the proceeds derived by any government agency or government-owned or controlled corporation engaged in the utilization and development of the national wealth based on the following formula whichever will produce a higher share for the local government unit:

1) One percent (1%) of the gross sales or receipts of the preceding calendar year; or

2) Forty percent (40%) of the mining taxes, royalties, forestry and fishery charges and such other taxes, fees or charges, including related surcharges, interests, or fines the government agency

(f) Towards this end, the State shall approve the construction of an additional dam in Bayabas, Dona Remedios Trinidad, Bulacan, to augment the active capacity of the Angat Dam in supplying the Metro Manila's progressively increasing demands for the supply of water and energy generation, and establish a means for transparent, effective and efficient collection of one (1) percent share in the gross sales of entities that will be granted the administrative concession for the

development, utilization, exploitation of Angat water resources as provided by the Local Government Code.

SECTION 4. Definition of Terms. For purposes of this Act the following terms are hereby defined as:

- a.) **"Absorbed water.** Water held mechanically in a soil or rock mass and having physical properties not substantially different from ordinary water at the same temperature and pressure.
- b.) **Active capacity.** The reservoir capacity normally usable for storage and regulation of reservoir inflows to meet established reservoir operating requirements. It extends from the highest of either the top of exclusive flood control capacity, the top of joint use capacity, or the top of active conservation capacity, to the top of inactive capacity. It is also the total capacity less the sum of the inactive and dead capacities. The reservoir capacity that can be used for irrigation, power, municipal and industrial use, fish and wildlife, recreation, water quality, and other purposes.
- c.) **Affected environment.** Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as the result of a proposed human action. Also, the chapter in an environmental impact statement describing current environmental conditions.
- d.) **Beneficial use.** Water loss through use for the betterment of society, e.g. irrigation or municipal use.
- e.) **Capability.** The maximum load that a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time without exceeding approved limits of temperature and stress.
- f.) **Climate.** Average conditions of the weather over a number of years
- g.) **Consequences.** Potential loss of life or property damage downstream of a dam caused by flood waters released at the dam or by waters released by partial or complete failure of the dam. This includes effects of landslides upstream of the dam on property located around the reservoir. Potential number of lives that would be lost from a dam failure and an uncontrolled reservoir release (considers load, failure modes, and estimated population distribution warning times).
- h.) **Conservation.** Increasing the efficiency of energy use, water use, production, or distribution.
- i.) **Dam.** Any barrier of any kind whatsoever which is capable of impounding or controlling the flow of water, including but not limited to storm water retention or detention dams, flood control structures, dikes, and incompletely breached dams.

- j.) **Flood.** A general and temporary condition of partial or complete inundation of normally dry land areas.
- k.) **"Government Agencies".** --- Refers to national, local and regional agencies and instrumentalities including government-owned and controlled corporations.
- l.) **Hazard Potential.** Probable damage that would occur if the structure failed, in terms of loss of human life and economic loss or environmental damage.
- m.) **Irrigation.** Act of supplying dry land with water in order to grow crops or other plants. Application of water to lands for agricultural purposes.
- n.) **Irrigation requirement.** Quantity of water, exclusive of effective precipitation, that is required for crop production.
- o.) **Owner.** Any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency or political or administrative subdivision of the state, or any other legal entity of any kind holding legal title to the dam.
- p.) **Structure.** Pertains to the dam, its appurtenances, abutments and foundation.

SECTION 5. Scope. *Unless specified herein this Act shall apply to the Angat Water system and all agencies and corporations that will be tasked for the construction operation and maintenance of additional dams that will augment the active capacity of the Angat Dam.*

SECTION 6. Role of the Local Government Units. – *the LGU's shall have the primary responsibility in the effort of enforcing the provisions of this Act and its IRR.*

SECTION 7. Appropriations. *The amount necessary to carry out the provisions of this Act shall be charged against the current year's appropriation of the concerned government agencies. Thereafter, such sums as may be necessary for the operation and maintenance of this Act shall be included in the General Appropriations Act.*

SECTION 8. Implementing Rules and Regulations. *Within ninety (90) days after the effectivity of this Act, the provincial governments of Bulacan and Pampanga, together with the DENR, DILG and the Local Water Utilities Administration (LWUA), in consultation with the National Irrigation Administration (NIA), the Manila Waterworks and Sewerage Board (MWSS) and the National Power Corporation (NPC), shall promulgate the implementing rules and regulations governing this Act.*

SECTION 9. Separability Clause. *If for any reason, any provision of part hereof is declared invalid, the other provisions not affected thereby shall remain in full force and effect.*

SECTION 10. Repealing Clause. – *Any provision of the law, presidential decree, executive orders, rules and regulations contrary to the provision of this Act is hereby repealed, amended or modified accordingly.*

SECTION 11. Effectivity. – *This Act shall take effect fifteen (15) days after its complete publication in the Official Gazette or in at least two (2) newspapers of general circulation, whichever comes earlier.*

Approved,