

HOUSE OF REPRESENTATIVES

H.B. No. 4527



Introduced by Congressman Deogracias Victor "DV" B. Savellano

EXPLANATORY NOTE

Climate change, the *El Niño* phenomenon, tropical storms and super typhoons and other natural phenomena have strained the country's already fragile fresh water resources threatening wide-spread environmental disaster. This is exacerbated by the continued extraction of subsurface water by large owners and operators of deep wells drying up the aquifers in many areas forcing them to dig deeper wells still to mine for fresh water causing in the process land subsidence, salt water intrusion and chemical leaching.

Forest denudation and paved open spaces have diminished natural percolation making the rain that fall to waste as run-off water aggravating downstream flooding during the rainy season and whenever the country is visited by tropical storms and super typhoons. Add this to the competition for the country's limited fresh water resources and the sustainable supply of fresh water for food production, domestic, commercial and industrial use is greatly affected.

Because of problems on sustainability of supply, there exists a high number of applicants wanting to extract more subsurface water through the construction of more deep wells but their approval are held pending by the National Water Resources Board due to diminishing volume of water underground triggering the illegal construction of deep wells depleting further the aquifers of stored fresh water without provisions for their immediate replenishment. Not even the high fees for water extraction permits have deterred the construction of illegal deep wells thus promoting corruption in the permit issuing agencies.

There is a need therefore to institute urgent mitigating measures to harvest, store and utilize rainwater to soften the impact of climate change, the *El Niño*, tropical storms and super typhoons, natural phenomena and problems caused by excessive subsurface water extraction. For the reasons already cited above, this representation seeks to find relief by ordering and authorizing the appropriate agencies, bureaus and offices under the Department of Environment and Natural Resources (DENR), the Department of Agriculture (DA) and the Department of Public Works and Highways (DPWH) to require all deep-well owners and operators, as well as owners of construction projects of all types, including applicants for water extraction permits and environmental compliance certificate (ECC), to incorporate, construct and install artificial recharge and percolation wells so that the water they extract from the aquifers will be replenished, restored and augmented.

Deogracias Victor "DV" B. Savellano
Congressman
1ST District, Ilocos Sur

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AN ACT

REQUIRING ALL DEEP-WELL OWNERS AND OPERATORS, INCLUDING APPLICANTS FOR WATER EXTRACTION PERMITS TO INCORPORATE, CONSTRUCT AND INSTALL ARTIFICIAL RECHARGE WELLS SO THAT THE WATER THEY EXTRACT FROM THE AQUIFERS WILL BE REPLENISHED THUS HELPING MITIGATE THE EFFECTS OF THE *EL NIÑO*, CLIMATE CHANGE AND OTHER PROBLEMS ON FRESH WATER, AND FOR OTHER PURPOSES.

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

SECTION 1. Title - This Act shall be known as "Aquifer Protection and Conservation Act of 2016".

SECTION 2. Declaration of Policy – It shall be the policy of the State to promote, protect and preserve the well-being of aquifers as source of fresh water to meet the national demand be it for domestic, agricultural, commercial and industrial uses.

The State shall promote and encourage the development and dissemination of sustainable technologies that shall maximize utilization of aquifers potable fresh water, including the development of technology for the conservation, storage and utilization of rainwater as an alternative source of potable water.

Thus, it is hereby declared that it shall be the policy of the State to identify, protect and preserve aquifers and other alternative storage systems for the conservation of surplus surface fresh water.

SECTION 3. Definition of Terms – As used in this Act or in its Implementing Rules and Regulations, the following shall be understood as:

- a. *"Aquifer"* refers to a body of saturated, permeable and porous materials located from under the earth's surface, including caverns, caves, sandstone, conglomerate, fractured limestone and unconsolidated sand and gravel through which liquid water can easily move and be stored.
- b. *"Artificial recharge systems"* refers to the artificial method of assisting natural percolation through mechanical means to hasten the conveyance of surplus surface water to the aquifers and other subsurface water containment for the purpose of mitigating downstream flooding due to run-offs, saltwater intrusion and for the recovery of water for future use.
- c. *"Chemical leaching"* refers to the contamination of the soil and groundwater of chemicals and other pollutants coming from surface sources usually from industrial plants, garbage dumps, households and from the application of agricultural inputs.

- d. *"Climate change"* refers to the change in the mean temperature of the earth brought about by natural phenomena made worse by human-induced activity.
- e. *"Downstream flooding"* refers to the collection of unusually large volume of rainwater that falls on the earth surface elsewhere and flows to inundate low lying areas.
- f. *"El Niño phenomenon"* refers the abnormal weather pattern caused by the warming of the Pacific Ocean near the equator off the coast of South America bringing heavy rains La Niña to the western hemisphere and long dry spell to the eastern hemisphere.
- g. *"Evapotranspiration"* refers to the combined net effect of evaporation, which is the return of moisture to the atmosphere from the earth's surface, and transpiration, which is the process by which plants return moisture to the air.
- h. *"Groundwater"* refers to all forms of water that occurs naturally from sources below the soil surface including wells, springs, aquifers and subterranean vaults.
- i. *"Land subsidence"* refers to the loss of substantial regional surface elevation due to human activities or natural processes that result to removal of subsurface support.
- j. *"Natural percolation"* refers to that part of the water cycle that occurs after rain or snow fall when water filters down through aerated soil due to gravity.
- k. *"Rainwater harvesting"* refers to the process of collection of rainwater from surfaces on which rain falls, filtering it and storing it for multiple uses.
- l. *"Salt water intrusion"* refers to the movement of saline water in coastal areas into freshwater aquifers rendering underground fresh water resources brackish or salty.
- m. *"Subsurface water"* refers to all solid, liquid or gaseous forms of water that occurs beneath the earth's surface.
- n. *"Surface water"* refers to all naturally occurring water found in estuaries, lakes, rivers, pond, reservoirs, ponds, seas, etc.

SECTION 4. General Provisions – The National Water Resources Board (NWRB) shall be the lead agency designated to implement the protection and conservation of the country's aquifers as a system for the storage and supply of sustainable potable water for domestic, agricultural, commercial and industrial uses through the harvesting of rainwater and artificial recharging of the aquifers with the same. The agency is hereby conferred with regulatory and quasi-judicial powers and shall be responsible for but not limited to the following:

- a. Accept, evaluate and approve applications of water extraction permits;
- b. Cancel outstanding water extraction permits found defective in compliance;
- c. Provide technical assistance in the design, construction and implementation of rainwater harvesting and artificial recharge systems to duly licensed water extractors and to applicants for water extraction permits;
- d. In coordination with other agencies, enforce all laws and ordinances pertaining to the preservation of the well-being of aquifers as sustainable source of potable fresh water;
- e. Conduct periodic inspection of existing deep wells, shallow tube wells, rainwater harvesting and artificial recharge systems to ascertain conformity to the provisions of this Act and its Implementing Rules and Regulations; and
- f. Act as repository of all data and records pertaining to the preservation and conservation of the country's aquifers and other subsurface water containment systems.

SECTION 5. Penalties – Any person or entity, natural or juridical, found violating or cause the obstruction or hamper the implementation of this Act including its Implementing rules and Regulations shall be meted any or all of the following:

- a. Pay fine of Five Million Pesos (P5,000,000.00) or imprisonment from six months to six years, or both;

- b. If the offense is committed by a juridical entity, the penalty shall be imposed against the officers, employees and members who participated in the commission of the offense, without prejudice to the filing of civil and administrative charges against the juridical entity;
- c. Any person or entity who shall cause to obstruct, prevent or refuse the inspection pursuant to the visitorial powers of implementing agencies of properties, private or public domain, shall be held criminally and shall be liable to pay fine of not exceeding One Hundred Thousand Pesos (P100,000.00) or imprisonment of not exceeding one (1) year, or both.

SECTION 6. Fees, Administrative Fines and Sanctions – The NWRB shall be empowered to undertake the any of the following or other mode of action in conformity to the intent of this Act:

- a. Suspend, revoke or cancel outstanding water extraction permit found in violation of this Act or its Implementing rules and Regulations;
- b. Issue cease and desist order against any person or entity found in violation of the provisions of this Act or its Implementing Rules and Regulations;
- c. Declare any person or entity in contempt for the violation this Act and its implementing Rules and Regulation and shall be punished similarly as in any indirect contempt of the Courts;
- d. Promulgate rules and regulations, orders and decisions for compliance and set fines and sanctions for failure; and
- e. Retain collected fees, revenues, fines and other impositions with the agency which shall be used as trust fund for the furtherance of the implementation of this Act.

SECTION 7. Appropriations – The initial funding necessary for the implementation of this Act shall be sourced from the current fiscal year appropriation of the NWRB and such amounts as maybe identified by the President of the Republic of the Philippines, thereafter, the amount needed for the operation the agency for the implementation of this Act shall be included in the annual General Appropriations Act.

SECTION 8. Rules and Regulations - The NWRB in coordination with the DA, DENR, DOST and the DPWH, with the participation of concerned committees from the House of Representatives and the Senate, shall promulgate the Implementing Rules and Regulations for the proper implementation of this Act.

SECTION 9. Repealing Clause - All laws, decrees, executive orders, memorandum orders, memorandum circulars, administrative orders, ordinances or any part thereof, inconsistent of this Act are hereby deemed repealed or modified accordingly.

SECTION 10. Separability Clause. - In the event that any provision of this Act is declared unconstitutional, the validity of the remainder shall not be affected thereby.

SECTION 11. Effectivity Clause. - 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.

Approved,