Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
First Regular Session

House Bill No. 5953

Introduced by REP. LORENZ R. DEFENSOR

EXPLANATORY NOTE

The Philippines faces an emerging water crisis marked by the rapid depletion of groundwater reserves, land subsidence, and increasing contamination of aquifers. With population growth, urbanization, and industrialization accelerating the demand for water, the country's reliance on deep wells and underground aquifers has reached unsustainable levels. In many areas, excessive groundwater extraction has resulted in alarming environmental and public health consequences, including the formation of sinkholes, saltwater intrusion, and deteriorating water quality.

According to data from the National Water Resources Board (NWRB), groundwater currently supplies more than half of the country's water demand, particularly in urban and agricultural areas. However, unregulated extraction has led to overdrawn aquifers, threatening both water availability and ecosystem balance. The worsening frequency of droughts and extreme weather events, brought by climate change, further compounds the risks to national water security.

While the country's existing water laws—most notably Presidential Decree No. 1067 or the Water Code of the Philippines—provide a framework for water use and allocation, they are no longer sufficient to address the contemporary challenges of groundwater depletion, contamination, and uncoordinated extraction. Similarly, the Clean Water Act of 2004 and the Ecological Solid Waste Management Act of 2000 focus on pollution and waste but do not directly regulate groundwater protection. There remains, therefore, a critical gap in ensuring the long-term sustainability and equitable management of both surface and underground water resources.

This proposed measure, titled the "National Groundwater Preservation and Management Act," seeks to establish a comprehensive policy framework to ensure the sustainable development, equitable access, and integrated management of the country's water resources for the benefit of present and future generations. It institutionalizes the National Groundwater Preservation and Management Program (NGPMP) to be led by the Department of Environment and Natural Resources

(DENR), through the NWRB, in coordination with relevant national agencies and local government units (LGUs).

The measure mandates the conduct of a nationwide inventory and mapping of both surface and underground water resources, the designation of critical groundwater areas, and the imposition of moratoria on new well permits where aquifers are already overdrawn. It also requires environmental impact assessments (EIA) for new extraction projects and integrates water management planning into local land use and climate action frameworks.

To safeguard public health, the bill compels all existing groundwater users to install water treatment facilities compliant with Department of Health (DOH) standards, with non-compliant wells subject to decommissioning. Furthermore, it promotes the shift toward surface water utilization through investments in small impounding projects, dams, and rainwater harvesting systems—reducing dependency on underground sources.

Recognizing the essential role of local governments, the proposed Act requires LGUs to incorporate groundwater and sinkhole risk management into their Comprehensive Land Use Plans (CLUPs) and Local Climate Change Action Plans (LCCAPs), maintain registries of wells and water quality data, and allocate resources for groundwater monitoring and preservation.

The bill likewise provides incentives under the Green Jobs Act for entities that adopt water-saving technologies, establish treatment systems, or implement recharge and conservation projects. Strict penalties are imposed on those who extract groundwater without valid permits or fail to comply with environmental and reporting requirements.

In essence, this measure seeks to balance economic development with ecological sustainability by institutionalizing mechanisms for water governance, integrating environmental safeguards, and promoting investments in climate-resilient water systems. It supports the Philippines' commitments under the United Nations Sustainable Development Goals (SDG 6: Clean Water and Sanitation and SDG 13: Climate Action), and strengthens national resilience against the mounting threats of water scarcity and environmental degradation.

In view of the foregoing, the immediate passage of this measure is earnestly sought.

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AN ACT INSTITUTING
THE NATIONAL GROUNDWATER PRESERVATION AND MANAGEMENT ACT

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

SECTION 1. Short Title. This Act shall be known as the "National Groundwater Preservation and Management Act."

SEC. 2. Declaration of Policy. It is the policy of the State to ensure the sustainable development, equitable access, and integrated management of both surface and underground water resources for the benefit of present and future generations. The State shall:

(a) Promote the use and protection of surface water sources for water security, food production, and renewable energy;
(b) Regulate groundwater extraction to prevent sinkholes, land subsidence, and contamination; and
(c) Safeguard public health through water quality standards and environmental protection.

SEC. 3. Definition of Terms. In addition to the definitions provided under the Water Code of the Philippines (P.D. 1067), the following terms shall mean:

(a) Groundwater – water beneath the surface of the ground, including aquifers, deep wells, and springs.
(b) Surface water – water found on the surface of the land such as rivers, lakes, reservoirs, streams, ponds, and wetlands. **Spring water that can be accessed from the surface shall be considered as surface water**.

(c) Water treatment facility – any structure designed to purify extracted water to meet the standards of the Sanitation Code of the Philippines.

SEC. 4. National Groundwater Preservation and Management Program. There is hereby established a National Groundwater Preservation and Management Program (NGPMP) to be led by the Department of Environment and Natural Resources (DENR) through the National Water Resources Board (NWRB), in coordination with the Department of Public Works and Highways (DPWH), Department of Agriculture (DA), Department of Energy (DOE), and Local Government Units (LGUs). The Program shall:

(a) Conduct a comprehensive inventory and mapping of both surface and groundwater resources nationwide;
(b) Designate and regulate critical groundwater areas, including moratoria on new wells where aquifers are overdraw;
(c) Require environmental impact assessments (EIA) for new extraction projects;
(d) Prioritize the development of surface water systems to reduce dependence on groundwater; and
(e) Integrate water management programs into local land use and climate action plans.

SEC. 5. Regulation of Groundwater Extraction.

(a) The National Water Resources Board (NWRB) shall regulate groundwater extraction nationwide. No new water permits for underground water shall be issued in areas identified as over-extracted or environmentally critical.

(b) Existing groundwater operators shall be required to install and operate water treatment facilities compliant with Department of Health standards within three (3) years from the effectivity of this Act. Failure to comply, there water permit shall be revoked.

If there is an existing water treatment facility in operation within the area, the NWRB may accept new Water Permit Applications; however, within one (1) year from the issuance of a Conditional Water Permit, the permittee shall construct and operationalize its own water treatment facility. Failure to comply within the prescribed period shall cause the automatic revocation of the permittee's Conditional Water Permit.

(c) Groundwater wells without treatment facilities after such period shall be decommissioned under the supervision of the NWRB and the concerned Local Government Units (LGUs).

(d) In areas without access to surface water or water service providers, the NWRB may grant conditional permits for groundwater extraction, subject

to environmental impact assessment and compliance with sanitation standards.

(e) If there is an existing water treatment plant utilizing surface water within a given area, the NWRB shall refrain from issuing new conditional water permits and groundwater extraction permits to prevent over-extraction and promote the sustainable use of surface water sources.

SEC. 6. Treatment of Groundwater. — To ensure the safety and potability of groundwater intended for public consumption and use, the following standard treatment processes shall be observed:

a) Coagulation. — The process of applying aluminum sulfate or similar coagulants to bind suspended particles such as silt, clay, and organic matter present in raw groundwater.
b) Flocculation. — The process of gently mixing coagulated water at controlled speeds to allow the formation of larger, more stable flocs for easier removal during subsequent treatment stages.
c) Sedimentation. — The process of allowing flocs to settle by gravity in a sedimentation basin, thereby separating the suspended solids from the clarified water.
d) Rapid Sand Filtration. — The process of passing the clarified water through layers of sand and other granular media to further remove remaining fine particles and impurities.
e) Chlorination. — The process of disinfecting the filtered water through the application of chlorine or equivalent agents to eliminate harmful microorganisms, including bacteria, viruses, and parasites, ensuring that the treated groundwater meets the prescribed water quality standards.

Provided, that if a new technology for the treatment of water emerges that will achieve the same water standards for the removal of harmful bacteria, micro-biological elements, and sediments in a more efficient manner than the above, then the same may be used in lieu of the process described in this section.

SEC. 7. Role of Local Government Units. - LGUs shall:

(a) Incorporate groundwater and sinkhole risk management into their Comprehensive Land Use Plans (CLUPs) and Local Climate Change Action Plans (LCCAPs);
(b) Maintain registries of wells, water quality, and extraction data;
(c) Allocate at least one percent (1%) of their development fund for groundwater preservation and monitoring; and
(d) Coordinate with PHIVOLCS and the DENR in sinkhole prevention and response measures.

SEC. 8. Health and Environmental Safeguards. All groundwater extraction and use shall comply with the standards of the Sanitation Code of the Philippines and the

Clean Water Act (R.A. 9275). The NWRB shall coordinate with the DOH to ensure that water used for domestic purposes is treated, monitored, and safe for human consumption.

SEC. 9. Promotion of Surface Water Utilization. The NWRB, in coordination with the DPWH and DA, shall promote public and private investments in surface water infrastructure, including small impounding projects, dams, and rainwater harvesting systems, to reduce reliance on deep wells and aquifers.

SEC. 10. Incentives. - Entities implementing water treatment systems, recharge projects, or water-saving technologies shall qualify for incentives under the Green Jobs Act (RA 10771) and may access funding from the People's Survival Fund or other climate financing facilities.

SEC. 11. Environmental Impact Assessment and Monitoring. An Environmental Impact Assessment (EIA) shall be mandatory for all new groundwater extraction projects. The DENR shall maintain a database on water resource conditions and submit an annual report to Congress detailing aquifer health, sinkhole risks, and compliance levels.

SEC. 12. Funding. The initial funding for the implementation of this Act, **which should be after two years from the effectivity of this Act,** shall be charged against the appropriations of the DENR, DPWH, DA and NWRB. Subsequent funding shall be included in the annual General Appropriations Act. The People's Survival Fund and Local Disaster Risk Reduction and Management Funds may also be utilized for climate-resilient water projects.

SEC. 13. Penal Provisions. Any person or entity that extracts groundwater without a valid permit, tampers with monitoring systems, or fails to comply with treatment and reporting requirements shall be subject to penalties under the Water Code, without prejudice to higher penalties imposed under this Act.

SEC. 14. Implementing Rules and Regulations. Within ninety (90) days from effectivity, the DENR and NWRB, in coordination with the DPWH, DOH, and LGUs, shall promulgate the necessary rules and regulations for the implementation of this Act.

SEC. 15. ***Separability Clause.*** **–** If any portion or provision of this Act is declared unconstitutional, the remainder hereof or any provisions not affected thereby shall remain in force and effect.

SEC. 16. ***Repealing Clause.*** – Any law, presidential decree or issuance, executive order, letter of instruction, rule, or regulation inconsistent with the provisions of this Act is hereby repealed or modified accordingly.

SEC. 17. ***Effectivity.*** **–** This Act shall take effect fifteen (15) days after its complete publication in the Official Gazette or in a newspaper of general circulation.

Approved,