

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
First Regular Session

HOUSE BILL NO. 6034



Introduced by: Kababaihan Kabalikatan para sa Kapakanan at Kaunlaran ng Bayan (4K) Party-list
Representative Iris Marie D. Montes

AN ACT
PROVIDING FOR THE MANAGEMENT, CONTROL, REGULATION, AND UTILIZATION OF RAINWATER RUNOFF, AND THE IMPROVEMENT OF ECOLOGICAL CHARACTERISTICS OF CATCHMENTS TO ADDRESS FLOODING AND WATER SUPPLY NEEDS IN URBAN AND RURAL CENTERS, AND CREATING THE NECESSARY INSTITUTIONAL MECHANISMS THEREFOR

EXPLANATORY NOTE

The Philippine archipelago receives abundant rainfall, yet struggles with its uncontrolled runoff. This leads to widespread flooding, soil erosion, waterway pollution, groundwater depletion, causing extensive damage to infrastructure and livelihoods, posing health risks, and hindering agriculture. This paradox of a water rich nation experiencing both scarcity and excess highlights the critical need for a sustainable water resource management strategy.

This proposed law aims to establish a comprehensive framework for the managing and utilizing rainwater runoff, encouraging harvesting, promoting permeable surfaces, and integrating green infrastructure. The goal is to transform rainwater from a destructive force into a valuable asset for water supply, disaster risk reduction, and ecological balance.

Recent studies strongly support this approach: A 2002 study on rainwater harvesting (RWH) in the Philippines noted that despite abundant rainfall, only 4% is currently utilized, highlighting a vast untapped potential. This study, and others emphasizes RWH as an effective complementary and viable alternative to large-scale water withdrawals, enhancing water security and environmental sustainability.¹

Research on urban runoff, such as a 2024 study on Mandaue City, indicates that significant portions of urban areas are ideal for rainwater retention,

¹ Monjardin, Ente, Lorenzo, "Analysis of Rainwater Harvesting Methods Considering the Impacts of Climate Change." Available at <https://www.researchGate.net/profile/Cris-Edward>

Monjardin/Dublication/361318955 Analysis of Rainwater Harvestino Methods Considering the Impacts of Climate Chanoe/Iinks/638acc382c563722f2333066/Analvsis-of-Rainwater-HarvestinQ-Methods-Considerina-the-Impacts-of-Clifnate-Chanae.pdf.
Accessed on 01 November2025.

emphasizing the need for measures like increasing green spaces to mitigate flooding from impervious surfaces.²

Another 2024 study focused on Mindoro proposed an innovative aqueduct system for rainwater harvesting, demonstrating its potential to address water scarcity and transform flood water into a valuable resource.³ Further research indicates that treated rainwater can even meet potable water standards, expanding its potential uses beyond non-potable applications.⁴

This bill, which serves as a counterpart to Senate Bill No. 288 of Senator Francis N. Pangilinan, aims to conserve rainwater and reduce runoff by providing for its utilization in urban and rural irrigation, groundwater recharge, firefighting, and nonpotable uses like watering plants and flushing toilets.

This will also help address water shortages in various areas. Given the limitations in Republic Act No. 6716 (Rainwater Collector and Springs Development Act of 1989) in managing and utilizing rainwater runoff, the approval of this bill is earnestly sought.


IRIS MARIE D. MONTES
Kababaihan Kabalikatan para sa Kapakanan
at Kaunlaran ng Bayan (4K) Party-list

² Banados, Quijano, "Rainwater Retention SiteAssessmentFor Urban FloodRisk Reduction And Flood Defence In Mandaue City, Philippines." Available at <https://isprs-annals.copernicus.org/articles/X-3-WI-2022/1/2022/isprs-annals-X-3-WI-2022-12022.odf>. Accessed on 01 November 2025

³ De Jesus, Espeleta , Arellano, and Marcos, "/4 Novel Rainwater Harvesting System for Mindoro, Philippines." Available at https://www.e3s-conferences.org/articles/e3sconf/pdf/2024/116/e3sconf_icsce2024_03002.pdf. Accessed on 01 November 2025

⁴ Cano, Guilalas, Lumas, "Proposed Rainwater Harvesting System with Infiltration: An Alternative Source of Potable Water." Published in February 2024. Available at <https://www.researchGate.net/Dublication/378152749> Proposed Rainwater Harvesting System with Filtration An Alternative Source of Potable Water. Accessed on 01 November 2025

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
First Regular Session

HOUSE BILL NO. 6034

Introduced by: Kababaihan Kabalikatan para sa Kapakanan at Kaunlaran ng Bayan (4K) Party-list
Representative Iris Marie D. Montes

AN ACT
PROVIDING FOR THE MANAGEMENT, CONTROL, REGULATION, AND
UTILIZATION OF RAINWATER RUNOFF, AND THE IMPROVEMENT OF
ECOLOGICAL CHARACTERISTICS OF CATCHMENTS TO ADDRESS FLOODING
AND WATER SUPPLY NEEDS IN URBAN AND RURAL CENTERS, AND CREATING
THE NECESSARY INSTITUTIONAL MECHANISMS THEREFOR

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

SECTION 1. *Short Title.* - This Act shall be known as the "Rainwater Runoff Management and Control Act."

SEC. 2. *Purpose.* - The purpose of this Act is to establish minimum rainwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public. This seeks to meet that purpose through the following objectives:

(a) Minimize increase in rainwater runoff from any development, both existing and proposed, in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;

(b) Minimize increase in nonpoint source pollution caused by rainwater runoff development which would otherwise degrade local water quality;

(c) Minimize the annual volume of surface water runoff which flows from any specific site during and following development to not exceed the predevelopment hydrologic regime to the maximum extent practicable; and

d) Reduce rainwater runoff rates and volumes, soil erosion, and nonpoint source pollution, wherever possible, through rainwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

SEC. 3. *Definition of Terms.* - As used in this Act:

a) Applicant means a property owner or agent who has filed an application for a rainwater management permit;

b) Building means any structure built for the support shelter, or enclosure or person, animals, chattels, or moveable property of any kind and which is permanently affixed to the land;

c) Building Official means the Local Building Official as appointed or designated pursuant to PD 1096;

(d) Certificate of Occupancy means a permit issued by the Zoning Officer indicating that the use of the building or land in question is in conformity with the Zoning Ordinance or that there has been a legal variance therefrom, as provided by the ordinance;

(e) Channel means a natural or artificial watercourse with definite bed and banks that conducts continuously or periodically flowing water;

(f) Dedication means the deliberate appropriation of property by its owner for general public use;

(g) Detention means the temporary storage of rainwater runoff in a rainwater management practices with goals of controlling peak discharge rates and providing gravity settling of pollutants;

(h) Developer means a person or entity who undertakes land disturbance or development activities;

(i) Development means any man-made change to improve or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operation;

(j) Drainage Easement means a legal right granted by the landowner to a grantee allowing use of private land for rainwater management purposes;

(k) Erosion and Sediment Control Plan means a plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities;

(l) Hotspot is an area where land use or activities generate highly contaminated runoff, with concentration of pollutants in excess of those typically found in rainwater;

(m) Impervious Coverage refers to those surfaces that cannot effectively infiltrate rainfall (e.g. building rooftops, pavement, sidewalks, driveways etc.);

(n) Industrial Rainwater Permit refers to a National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial rainwater discharges or specifies on-site pollution control strategies;

(o) Infiltration is the process of percolating rainwater into the subsoil;

(p) Infiltration Facility is any structure or device designed to infiltrate water to the subsurface. These facilities may be above grade or below grade;

(q) Land Disturbance Activity \s any activity which changes the volume or peak flow discharge rate of rainfall from the land surface. This may include grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse;

(r) Landowner means the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land;

(s) Offsite Facility means a rainwater management measure located outside the subject property boundary described in the permit application for land development activity;

(t) Onsite Facility means a rainwater management measure located within the subject property boundary described in the permit application for land development activity;

(u) Rainwater Design Manual means the planning and design manual for the control of erosion, sediment and rainwater written by Department of Public Works and Highways;

(y) Rainwater Management means the use of structural or non-structural practices that are design to reduce rainwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates;

(z) Rainwater Retrofit means a rainwater management practice designed for an existing development site that previously had either no rainwater management practice in place or a practice inadequate to meet the rainwater management requirements of the site;

(aa) Rainwater Runoff means water flow on the surface of the ground, resulting from precipitation;

(bb) Rainwater Treatment Practices mean measures, either structural or nonstructural, that are determined to be the most effective, practical means for preventing for reducing point source or nonpoint source pollution inputs to rainwater runoff and water bodies; and

(cc) Recharge means the replenishment of underground water reserves;

(dd) Redevelopment means any construction, alteration or improvement exceeding 100 square meters in areas where existing land use is high density commercial, industrial, institutional or multi-family residential;

(ee) Stop Work Order means an order issued which requires that all construction activity on a site be stopped;

(ff) Watercourse means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface.

SEC. 4. Requirements for Rainwater Management Plan. - All landowners or developers of proposed commercial, industrial, and residential development or any residential multi-dwelling units of more than 1,000 square meter land area must submit a Rainwater Management Plan (RMP) as part of the site development application and approval process.

The RMP shall include the following information:

(a) Description of Existing Conditions - description of the existing condition shall be shown on a map. It shall include:

i. Topographic map with 1.0 meter minimum contours line or an appropriate contour interval of the land proposed for development or redevelopment;

ii. Location of natural waterways including banks and centerline of streams and channels;

iii. The normal shoreline, coastlines, outline of lakes, natural depression and ponds, including drainage flow lines; and

iv. Quantification of flows (discharge and volume) in its natural condition shall be provided.

(b) Proposed Site Development Plan - the proponent shall provide Site Development Plan (SDP) in an appropriate scale and size showing the following:

i. Retention/detention basins and lines of inflow and outflow;

ii. The location, size and slope of rainwater conduits and drainage swales;

iii. Rain, sanitary and combined sewer and outfalls; and

iv. Delineation of upstream and downstream drainage features and watersheds which might be affected by the development; and other environmental features including limits of wetlands areas, green buffers, planting strips, and any designated natural areas for rainwater management.

(c) Description of Proposed Rainwater Management System (RMS) - the proposed RMS shall be designed to safely and completely managed rainwater runoff onsite or offsite and provide facility to regulate the increased rainwater runoff, thus, maintain the natural hydrologic cycle and condition of flow in a locality. The purpose of the RMS is to reduce the risk of downstream flooding by reducing the amount of runoff and regulating the discharge release at a given time. The proposed RMS shall be accompanied by hydrologic and hydraulic calculations to adequately demonstrate the effectiveness of the plan.

The proposed RMS shall be designed to meet the desired flood frequency which is designated to a particular drainage structure as stated in the Design Manual of the DPWH. Higher flood frequency such as 25-year or higher may be required for major rivers and waterways. Specific details of the design criteria are incorporated in Section 4.

The plan shall be accompanied by relevant data (such as rainfall data in a locality), maps, and other descriptive material to include the following:

i. The extent of catchment, drainage channels on site and direction of the flow of the channels including the final outfall of the discharge from the site;

ii. Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storm proposed in Section 5. The calculations for determining peak flows are found in the Rainwater Design Manual to include description of design storm frequency, intensity, and duration, time of concentration, soil curve number or runoff coefficients, peak runoff rates and total runoff volumes, infiltration rates, culvert capacities, flow velocities, data on the increase in rate and volume of runoff for the design storm; and Technical specifications of the proposed SMS, providing descriptions of proposed rainwater conveyance practices to be on-site, existing off-site rainwater conveyance system including receiving streams, channels, and outfall and inlet locations. Include the elevations of locations and high water elevations.

SEC. 5. *Utilization of Rainwater.* - The following are the specific utilization of rainwater and the recommended facility to harness its volume for the intended use:

(a) Rainwater for rural irrigation - agriculture in the Philippines is predominantly rainfed. Rainwater catchments thus hold a significant potential to improve efficiency and sustainability of rainwater use for rainfed and upland agriculture in the country.

(b) Rainwater for urban irrigation - most of the urban centers are currently dependent on Class A water quality for irrigation supply which are costly and environmentally unsustainable. Utilization of Class A water for yard irrigation shall be minimized if not prohibited. Instead, rainwater shall be utilized for such purposes. The irrigation water shall come from the rainwater detention system. Rainwater as source for urban irrigation and/or watering of lawns shall be included in the development plans. Secondary source of water for irrigation may also come from treated grey water from effluent of treatment facility.

(c) Rainwater for groundwater recharge - the RMS is intended mainly to ensure natural balance of the hydrologic cycle by allowing rainwater to recharge the groundwater table that sustains the yield and production of deep wells. The proposed facility to allow for recharge may be in the form of the following best management system:

i. Lagoon or retention pond that allows for natural seepage to the ground water aquifer;

ii. Swales and depression storage;

iii. Porous or pavers blocks on some developed areas; and

iv. Retention channels. The sizes and dimensions of the above facility is dependent on the rainfall intensity and the size of the development.

(d) Rainwater for firefighting - considerable amount of water is also needed for firefighting. At present, water for firefighting comes from potable water sources which are expensive. Rainwater is a good substitute. The quality requirement may be upgraded to meet required standard that may not cause health issues and abrasion to machines. A separate storage tank for fire water reserve shall be constructed. Upgrading of the quality of water may be done using simple filtration system to remove suspended solids and other coarse materials that will interfere with electromechanical and pipe systems.

Other laws concerning the requirement of water for firefighting shall be considered.

(e) Rainwater for non-potable water supply source - rainwater subjected to primary and secondary treatment can be a viable secondary source for water supply in urban and rural areas. It can be used for the following purposes:

- i. Watering plants;
- ii. Washing of cars, floor yards;
- iii. Flushing of toilet (water quality should meet certain standard to avoid discoloration of fixtures); and
- iv. Fish ponds.

It is necessary to provide separate guidelines for water quality on the above mentioned usage for various commercial and industrial purposes. For potable water supply, strict compliance of water quality that will meet the Philippine National Standard for Drinking Water (PNSDW) is required.

(f) Rainwater for ecological requirements - seasonal fluctuation of rainfall affects the flora and fauna of waterways. The management of rainwater runoff provides steady release of water to the waterways enhancing their continued supply.

SEC. 6. *Preparation of the Rainwater Design Manual.* - The Department of Public Works and Highways (DPWH) is hereby directed to prepare the Rainwater Design Manual which should incorporate the following criteria:

In the interim period (within 1 year), the following shall be enforced:

(a) All sites shall establish rainwater management system to control the peak flow rates of rainwater discharge associated with specified design storms and reduce the generation of rainwater for the site to provide treatment for both water quality and quantity. Peak post-construction rainwater runoff will not exceed peak pre-construction rainwater runoff from the site to the greatest extent possible.

(b) All rainwater runoff generated from any development shall not discharge untreated rainwater directly into a jurisdictional wetland or local water body without adequate treatment.

(c) Structural and non-structural Rainwater Treatment System (RTS) shall be designed to treat the first 20 mm of rainwater runoff. That means for every one (1) hectare of new development, a 200 cubic meters of detention/retention tank shall be constructed to minimize flooding and improve water quality.

(d) Sanitary wastewater treatment facilities shall be designed and installed to comply with existing health regulations and meet the Effluent Standard of the DENR. Untreated sanitary waste should not be discharge to waterways and land surface without proper treatment and shall not come in contact with rainwater runoff. For discharge of treated effluent to water bodies, it shall meet the river classification. For unclassified rivers and water course. Class C water shall be met. For discharge to urban drainage system, the minimum requirement shall be Class D effluent. Any variation with the required standard set by DENR, the prescription provided by the DENR shall be followed.

(e) To protect stream channels from degradation, velocity of runoff water shall be limited to less than 1.0 m/s otherwise bank protection shall be provided.

(f) Rainwater discharges to critical areas with sensitive resources (including shellfish beds, swimming areas, water supply reservoirs and groundwater recharge areas) may be subject to additional performance criteria, or may need to utilize or restrict certain rainwater management practices.

(g) Rainwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots," may require the use of specific structural and pollution prevention practices.

(h) Prior to design, applicants are required to consult with the building official to determine if they are subject to additional rainwater design requirements.

(i) For existing development or develop areas, the rainwater management system requirement may be imposed on the following conditions:

i. Existing or old development shall submit to the building officials plans of existing rainwater management system to demonstrate its contribution to flood control and mitigation and rainwater management program;

ii. That at least 50 percent of the required volume shall be met within five (5) years from the effectivity of this Act; and

iii. The total required volume of storage may be the cumulative volume store from various storage such as cistern, lagoon onsite or offsite, and depression storage.

SEC. 7. Construction Inspection. -

(a) The applicant must notify the building official in advance before the commencement of construction.

(b) All applicants for commercial and multi-family residential units over four (4) units are required to submit actual record drawings for any rainwater management practices located on-site after final construction is completed.

The plan must show the final design specification for all rainwater management facilities and must be certified by a professional engineer. A final inspection is required before the release of any performance security, performance bond, or guaranty.

(c) Permanent vegetation must be seeded or planted within 30 days after the final grade is reached. Planting guidance for permanent vegetative practices is included in the Rainwater Design Manual. Any area of revegetation must exhibit a survival of a minimum of seventy-five percent (75%) of the crop cover throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy five percent survival for one year is achieved.

(d) The City/Municipal Engineer shall inspect all drainage facilities while under construction. When facilities were not constructed according to approved plans, the local government unit (LGU) has the explicit authority to compel compliance and have any situations corrected which are not according to the approved plans. All drainage facilities located on private property, whether dedicated to the LGU or not, shall be accessible at all times for inspection by the City/Municipal engineer or other responsible public official.

(e) The City/Municipal Engineer shall inspect all sanitary waste treatment facilities while under construction and upon completion to insure proper installation and connection to waste water collection systems when applicable. Proper function of sanitary waste treatment facilities is required prior final approval and issuance of a certificate of occupancy.

SEC. 8. *Maintenance and Repair of Rainwater Facilities.* -

(a) All rainwater management facilities must undergo a regular yearly inspection process at a frequency sufficient to determine the functioning ability of the conveyance system and any repair needs; at a minimum this should include inspection prior to the beginning of the typhoon season, prior to any forecast major rains that may equal the design requirements and after any major rain events.

(b) All drainage facilities located on private property, whether dedicated to the ECU or not, shall be accessible at all times for inspection by the City/Municipal Engineer or other responsible public officials. All sanitary waste treatment facilities located on private property shall be accessible for inspection for proper function by the City/Municipal Engineer or other responsible public officials where there is reason to suspect that a malfunction has resulted in rainwater runoff pollution by unsanitary waste,

(c) Parties responsible for the operation and maintenance of a rainwater management facility shall make records of the installation and of all, maintenance and repairs, and shall retain these records for at least five years.

These records shall be made available to the city during inspection of the facility and other reasonable times upon request.

(d) The building official shall notify the owner in writing that maintenance is required. The owner will have sixty (60) days from the receipt of such written notice to bring the facility into proper working order.

SEC. 9. *Enforcement and Penalties.* -

(a) Any person found to be in violation of any of the terms and provisions of this Act shall be found guilty of a misdemeanor and subject to a fine not to exceed Php50,000.00 or imprisonment for no more than ninety (90) days or both fine and imprisonment. A continuance of a violation without reasonable effort on the part of the defendant to correct shall constitute a new and separate offense each day.

(b) If the building official shall find that the provisions of this ordinance are violated, the person responsible for such violation shall be notified in writing, indicating the nature of the violation and ordering action necessary to correct it. Among those actions which he/she may be ordered is discontinuance of any actions on site.

(b) In case any post-construction rainwater practice is constructed, reconstructed, altered, repaired, or converted or any person would be damaged by such violation, in addition to other remedies, the building official may institute injunction, mandamus, or other appropriate action in proceeding to prevent violation of the final plan or any element of this plan.

(c) Violators may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time, after notice, the LGU may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

SEC. 10. *Separability Clause.* - If any provision of this Act is declared invalid or unconstitutional, the other provisions not affected by such declaration shall remain in full force and effect.

SEC. 11. *Repealing Clause.* - All laws, executive orders, administrative orders, and rules and regulations inconsistent with this Act are hereby repealed or amended accordingly.

SEC. 12. *Effectivity Clause.* - This Act shall take effect fifteen (15) days after its complete publication in the Official Gazette or in two (2) newspapers of general circulation.

Approved,