AN ACT concerning safety.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 1. Short title. This Act may be cited as the Green Infrastructure for Clean Water Act.

Section 5. Definitions. As used in this Act:

"Agency" means the Illinois Environmental Protection Agency.

"Green infrastructure" means any storm water management technique or practice employed with the primary goal of preserving, restoring, or mimicking natural hydrology. Green infrastructure includes, but is not limited to, methods of using soil and vegetation to promote soil percolation, evapotranspiration, and filtration. Green infrastructure includes the preservation and restoration of natural landscape features, such as forests, floodplains, headwaters, and wetlands. Green infrastructure also includes rain gardens, permeable pavements, green roofs, infiltration planters, trees and tree boxes, and rainwater harvesting for non-potable uses, such as toilet flushing and landscape irrigation.

Section 10. Legislative findings.

(a) The General Assembly finds that:

(1) urban storm water, when not properly controlled and treated, can cause pollution of the waters of the State, threaten public health, and damage property by carrying pollutants from our highways, streets, roads, parking lots, driveways, sidewalks, alleys, lawns, and other surfaces of low permeability into lakes, rivers, streams, and ponds;

(2) development can increase storm water runoff by increasing the size and number of paved and other impervious surfaces within a watershed and decreasing the extent of vegetated and other permeable surface areas that control storm water runoff through natural infiltration and evapotranspiration and groundwater recharge;

(3) current urban storm water related threats to the State's water resources include pollution, increased water temperatures, flooding, groundwater depletion, loss of habitat, stream bank erosion, sewer overflows, basement backups, contaminated drinking water sources, and sedimentation of waterways; and

(4) some studies show that preserving and expanding natural and built green infrastructure can minimize negative impacts and enhance the resilience of water infrastructure and water bodies.

(b) The General Assembly also finds that there are a number of potential benefits from the use of green infrastructure, including:

(1) Cleaner Water. Green infrastructure can reduce the volume of storm water runoff in combined and separate sewer systems, and the concentrations of pollutants in those discharges.

(2) Enhanced Water Supplies. Most green infrastructure approaches allow at least a portion of storm water to infiltrate surrounding soil, where it recharges the groundwater and stream base flows, contributing to drinking water supplies and helping to stabilize aquatic ecosystems. Green infrastructure systems that capture and reuse storm water also help to conserve other water sources.

(3) Reduced Flooding. Green infrastructure can help control surface flooding and stabilize local hydrology by reducing peak flows.

(4) Cleaner Air. Trees and vegetation improve air quality by filtering many airborne pollutants, thereby helping to reduce the incidence of respiratory illness.

(5) Increased Energy Efficiency. Trees and other vegetation create shade, reduce the amount of heat absorbing materials, and emit water vapor, which controls surface temperature, thus helping to alleviate the urban heat island effect. Limiting impervious surface, using light colored impervious surfaces and green roofs also mitigates extreme urban temperatures. By helping to lower ambient temperatures and, when incorporated on and around

buildings, helping to shade and insulate buildings from wide temperature swings, green infrastructure can reduce the energy needed for heating and cooling. Green roofs and shade can increase the life span of roofs, thus reducing the need for production and transportation of conventional roof materials. Energy use associated with pumping and treating can be reduced as storm water is diverted from wastewater collection, conveyance, and treatment systems.

(6) Mitigation of and Adaptation to Impacts of Climate Change. Green infrastructure strategies can reduce energy demands and, thus, greenhouse gas emissions by reducing storm water volume and the associated treatment required, reducing the amount of potable water needed, providing thermal insulation and shade for buildings, mitigating the urban heat island effect, and sequestering carbon. These strategies can also help with adaptation to projected climate change impacts, including increased storm intensity, flood potential, and impacts on the quantity of surface and ground water supplies.

(7) Wildlife Habitat. Stream buffers, wetlands, parks, meadows, and other forms of green infrastructure increase biodiversity within the urban environment.

(8) Community Benefits. Trees and plants improve urban aesthetics and community livability by providing recreational and scenic wildlife areas. Studies show that property values are higher, violence is reduced, and crime

is reduced when trees and other vegetation are present.

(9) Health Benefits. Studies show that people who have access to the open space provided by green infrastructure in their communities get more exercise, live longer, and report better health in general. Exposure to green infrastructure (even through a window) improves mental functioning, reduces stress, and reduces recovery time from surgery.

(10) Green Jobs. Designing, installing, and maintaining green infrastructure creates new jobs for architects, designers, engineers, construction workers, maintenance workers, landscape architects, landscapers, nurseries, and related services.

(11) Cost Savings. Using green infrastructure in certain situations can save or reduce (i) capital costs associated with paving, constructing curbs and gutters, and building large collection and conveyance systems; (ii) operating and maintenance expenses for treatment plants, pumping stations, pipes, and other hard infrastructure; (iii) energy costs for pumping water; (iv) costs associated with treatment during wet weather; and (v) costs of repairing the damage caused by storm water, such as stream bank restoration and flood damage.

Section 15. IEPA Study. By June 30, 2010, the Illinois Environmental Protection Agency, in consultation with the

Illinois Department of Natural Resources, the Illinois Department of Transportation, the Capital Development Board, storm water management agencies, and other interested parties that the Agency deems appropriate to include, shall submit to the General Assembly and the Governor a report that reviews the latest available scientific research and institutional knowledge to evaluate and document the following:

(a) The nature and extent of urban storm water impacts on water quality in watersheds in Illinois;

(b) Potential urban storm water management performance standards to address flooding, water pollution, stream erosion, habitat quality, and the effectiveness of green infrastructure practices to achieve such standards;

(c) The prevalence of green infrastructure use in Illinois;

(d) The costs and benefits of green versus grey infrastructure;

(e) Existing and potential new urban storm water management regulatory programs and methods and feasibility of integrating a State program with existing and potential regional and local programs in Illinois;

(f) Findings and recommendations for adopting an urban storm water management regulatory program in Illinois which includes performance standards and encourages the use of green infrastructure to achieve those standards; and

(g) The feasibility and consequences of devoting 20% of the Water Revolving Fund to green infrastructure, water and energy

efficiency improvements, and other environmentally innovative activities on a long-term basis.

Section 99. Effective date. This Act takes effect upon becoming law.