SB1489 Enrolled

1 AN ACT concerning safety.

2 Be it enacted by the People of the State of Illinois, 3 represented in the General Assembly:

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

6 Section 5. Definitions. As used in this Act:

7 "Agency" means the Illinois Environmental Protection8 Agency.

"Green infrastructure" means any storm water management 9 technique or practice employed with the primary goal of 10 preserving, restoring, or mimicking natural hydrology. Green 11 infrastructure includes, but is not limited to, methods of 12 using soil and vegetation to promote soil percolation, 13 14 evapotranspiration, and filtration. Green infrastructure includes the preservation and restoration of natural landscape 15 16 features, such as forests, floodplains, headwaters, and 17 wetlands. Green infrastructure also includes rain gardens, permeable pavements, green roofs, infiltration planters, trees 18 19 and tree boxes, and rainwater harvesting for non-potable uses, 20 such as toilet flushing and landscape irrigation.

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Section 10. Legislative findings.

22 (a) The General Assembly finds that:

SB1489 Enrolled - 2 - LRB096 10752 JDS 20941 b

1 (1) urban storm water, when not properly controlled and 2 treated, can cause pollution of the waters of the State, 3 threaten public health, and damage property by carrying 4 pollutants from our highways, streets, roads, parking 5 lots, driveways, sidewalks, alleys, lawns, and other 6 surfaces of low permeability into lakes, rivers, streams, 7 and ponds;

8 (2) development can increase storm water runoff by 9 increasing the size and number of paved and other 10 impervious surfaces within a watershed and decreasing the 11 extent of vegetated and other permeable surface areas that 12 control storm water runoff through natural infiltration 13 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: SB1489 Enrolled

1 (1) Cleaner Water. Green infrastructure can reduce the 2 volume of storm water runoff in combined and separate sewer 3 systems, and the concentrations of pollutants in those 4 discharges.

5 (2) Enhanced Water Supplies. Most green infrastructure approaches allow at least a portion of storm water to 6 7 infiltrate surrounding soil, where it recharges the 8 stream base flows, contributing groundwater and to 9 drinking water supplies and helping to stabilize aquatic 10 ecosystems. Green infrastructure systems that capture and 11 reuse storm water also help to conserve other water 12 sources.

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

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

Increased Energy Efficiency. Trees and other 19 (5) 20 vegetation create shade, reduce the amount of heat 21 absorbing materials, and emit water vapor, which controls 22 surface temperature, thus helping to alleviate the urban 23 heat island effect. Limiting impervious surface, using light colored impervious surfaces and green roofs also 24 25 mitigates extreme urban temperatures. By helping to lower 26 ambient temperatures and, when incorporated on and around

SB1489 Enrolled - 4 - LRB096 10752 JDS 20941 b

buildings, helping to shade and insulate buildings from 1 2 wide temperature swings, green infrastructure can reduce 3 the energy needed for heating and cooling. Green roofs and shade can increase the life span of roofs, thus reducing 4 5 the need for production and transportation of conventional 6 roof materials. Energy use associated with pumping and 7 treating can be reduced as storm water is diverted from 8 wastewater collection, conveyance, and treatment systems.

9 (6) Mitigation of and Adaptation to Impacts of Climate 10 Change. Green infrastructure strategies can reduce energy 11 demands and, thus, greenhouse gas emissions by reducing 12 storm water volume and the associated treatment required, reducing the amount of potable water needed, providing 13 14 thermal insulation and shade for buildings, mitigating the 15 urban heat island effect, and sequestering carbon. These 16 strategies can also help with adaptation to projected 17 impacts, including climate change increased storm intensity, flood potential, and impacts on the quantity of 18 19 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

SB1489 Enrolled - 5 - LRB096 10752 JDS 20941 b

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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.

9 (10) Green Jobs. Designing, installing, and 10 maintaining green infrastructure creates new jobs for 11 architects, designers, engineers, construction workers, 12 maintenance workers, landscape architects, landscapers, 13 nurseries, and related services.

14 (11) Cost Savings. Using green infrastructure in 15 certain situations can save or reduce (i) capital costs 16 associated with paving, constructing curbs and gutters, 17 and building large collection and conveyance systems; (ii) operating and maintenance expenses for treatment plants, 18 19 pumping stations, pipes, and other hard infrastructure; 20 (iii) energy costs for pumping water; (iv) costs associated with treatment during wet weather; and (v) costs of 21 22 repairing the damage caused by storm water, such as stream 23 bank restoration and flood damage.

24 Section 15. IEPA Study. By June 30, 2010, the Illinois 25 Environmental Protection Agency, in consultation with the SB1489 Enrolled - 6 -LRB096 10752 JDS 20941 b

Department of 1 Illinois Natural Resources, the Illinois 2 Department of Transportation, the Capital Development Board, 3 storm water management agencies, and other interested parties that the Agency deems appropriate to include, shall submit to 4 5 the General Assembly and the Governor a report that reviews the 6 scientific research and latest available institutional 7 knowledge to evaluate and document the following:

8 (a) The nature and extent of urban storm water impacts on 9 water quality in watersheds in Illinois;

(b) Potential urban storm water management performance 11 standards to address flooding, water pollution, stream 12 erosion, habitat quality, and the effectiveness of green 13 infrastructure practices to achieve such standards;

14 (c) The prevalence of green infrastructure use in Illinois; 15 (d) The costs and benefits of green versus grey 16 infrastructure;

17 (e) Existing and potential new urban storm water management regulatory programs and methods and feasibility of integrating 18 19 a State program with existing and potential regional and local 20 programs in Illinois;

(f) Findings and recommendations for adopting an urban 21 22 storm water management regulatory program in Illinois which 23 includes performance standards and encourages the use of green infrastructure to achieve those standards; and 24

25 (q) The feasibility and consequences of devoting 20% of the 26 Water Revolving Fund to green infrastructure, water and energy

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SB1489 Enrolled - 7 - LRB096 10752 JDS 20941 b efficiency improvements, and other environmentally innovative activities on a long-term basis.

3 Section 99. Effective date. This Act takes effect upon4 becoming law.