

Sen. Iris Y. Martinez

Filed: 3/25/2009

	09600SB1489sam002 LRB096 10752 JDS 24576 a
1	AMENDMENT TO SENATE BILL 1489
2	AMENDMENT NO Amend Senate Bill 1489, AS AMENDED,
3	by replacing everything after the enacting clause with the
4	following:
5	"Section 1. Short title. This Act may be cited as the Green
6	Infrastructure for Clean Water Act.
7	Section 5. Definitions. As used in this Act:
8	"Agency" means the Illinois Environmental Protection
9	Agency.
10	"Green infrastructure" means any storm water management
11	technique or practice employed with the primary goal of
12	preserving, restoring, or mimicking natural hydrology. Green
13	infrastructure includes, but is not limited to, methods of
14	using soil and vegetation to promote soil percolation,
15	evapotranspiration, and filtration. Green infrastructure
16	includes the preservation and restoration of natural landscape

09600SB1489sam002 -2- LRB096 10752 JDS 24576 a

1 features, such as forests, floodplains, headwaters, and 2 wetlands. Green infrastructure also includes rain gardens, 3 permeable pavements, green roofs, infiltration planters, trees 4 and tree boxes, and rainwater harvesting for non-potable uses, 5 such as toilet flushing and landscape irrigation.

6 Section 10. Legislative findings.

(a) The General Assembly finds that:

7

8 (1) urban storm water, when not properly controlled and 9 treated, can cause pollution of the waters of the State, 10 threaten public health, and damage property by carrying 11 pollutants from our highways, streets, roads, parking 12 lots, driveways, sidewalks, alleys, lawns, and other 13 surfaces of low permeability into lakes, rivers, streams, 14 and ponds;

15 (2) development can increase storm water runoff by 16 increasing the size and number of paved and other 17 impervious surfaces within a watershed and decreasing the 18 extent of vegetated and other permeable surface areas that 19 control storm water runoff through natural infiltration 20 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

-3- LRB096 10752 JDS 24576 a

1

sedimentation of waterways; and

2 (4) some studies show that preserving and expanding 3 natural and built green infrastructure can minimize 4 negative impacts and enhance the resilience of water 5 infrastructure and water bodies.

6 (b) The General Assembly also finds that there are a number 7 of potential benefits from the use of green infrastructure, 8 including:

9 (1) Cleaner Water. Green infrastructure can reduce the 10 volume of storm water runoff in combined and separate sewer 11 systems, and the concentrations of pollutants in those 12 discharges.

13 (2) Enhanced Water Supplies. Most green infrastructure 14 approaches allow at least a portion of storm water to 15 infiltrate surrounding soil, where it recharges the groundwater and stream base flows, contributing to 16 17 drinking water supplies and helping to stabilize aquatic 18 ecosystems. Green infrastructure systems that capture and 19 reuse storm water also help to conserve other water 20 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.

09600SB1489sam002

Increased Energy Efficiency. Trees and other 1 (5) 2 vegetation create shade, reduce the amount of heat absorbing materials, and emit water vapor, which controls 3 surface temperature, thus helping to alleviate the urban 4 5 heat island effect. Limiting impervious surface, using light colored impervious surfaces and green roofs also 6 7 mitigates extreme urban temperatures. By helping to lower 8 ambient temperatures and, when incorporated on and around 9 buildings, helping to shade and insulate buildings from 10 wide temperature swings, green infrastructure can reduce the energy needed for heating and cooling. Green roofs and 11 shade can increase the life span of roofs, thus reducing 12 13 the need for production and transportation of conventional 14 roof materials. Energy use associated with pumping and 15 treating can be reduced as storm water is diverted from wastewater collection, conveyance, and treatment systems. 16

17 (6) Mitigation of and Adaptation to Impacts of Climate 18 Change. Green infrastructure strategies can reduce energy 19 demands and, thus, greenhouse gas emissions by reducing 20 storm water volume and the associated treatment required, 21 reducing the amount of potable water needed, providing 22 thermal insulation and shade for buildings, mitigating the 23 urban heat island effect, and sequestering carbon. These strategies can also help with adaptation to projected 24 impacts, including increased 25 climate change storm intensity, flood potential, and impacts on the quantity of 26

1

surface and ground water supplies.

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

5 (8) Community Benefits. Trees and plants improve urban 6 aesthetics and community livability by providing 7 recreational and scenic wildlife areas. Studies show that 8 property values are higher, violence is reduced, and crime 9 is reduced when trees and other vegetation are present.

10 (9) Health Benefits. Studies show that people who have 11 access to the open space provided by green infrastructure 12 in their communities get more exercise, live longer, and 13 report better health in general. Exposure to green 14 infrastructure (even through a window) improves mental 15 functioning, reduces stress, and reduces recovery time 16 from surgery.

17 (10)Green Jobs. Designing, installing, and 18 maintaining green infrastructure creates new jobs for architects, designers, engineers, construction workers, 19 20 maintenance workers, landscapers, nurseries, and related 21 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,

09600SB1489sam002 -6- LRB096 10752 JDS 24576 a

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 6 7 Environmental Protection Agency, in consultation with the 8 Illinois Department of Natural Resources, the Illinois 9 Department of Transportation, storm water management agencies, 10 and other interested parties that the Agency deems appropriate to include, shall submit to the General Assembly and the 11 12 Governor a report that reviews the latest available scientific 13 research and institutional knowledge to evaluate and document 14 the following:

(a) The nature and extent of urban storm water impacts onwater 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;

21 (c) The prevalence of green infrastructure use in Illinois;
22 (d) The costs and benefits of green versus grey
23 infrastructure;

(e) Existing and potential new urban storm water managementregulatory programs and methods and feasibility of integrating

a State program with existing and potential regional and local
 programs in Illinois;

3 (f) Findings and recommendations for adopting an urban 4 storm water management regulatory program in Illinois which 5 includes performance standards and encourages the use of green 6 infrastructure to achieve those standards; and

7 (g) The feasibility and consequences of devoting 20% of the 8 Water Revolving Fund to green infrastructure, water and energy 9 efficiency, and other environmentally innovative activities on 10 a long-term basis.

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