

1 AN ACT concerning safety.

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

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

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

7 "Agency" means the Illinois Environmental Protection
8 Agency.

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

21 Section 10. Legislative findings.

22 (a) The General Assembly finds that:

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;

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

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

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

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
6 approaches allow at least a portion of storm water to
7 infiltrate surrounding soil, where it recharges the
8 groundwater and stream base flows, contributing 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.

19 (5) Increased Energy Efficiency. Trees and other
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
24 light colored impervious surfaces and green roofs also
25 mitigates extreme urban temperatures. By helping to lower
26 ambient temperatures and, when incorporated on and around

1 buildings, helping to shade and insulate buildings from
2 wide temperature swings, green infrastructure can reduce
3 the energy needed for heating and cooling. Green roofs and
4 shade can increase the life span of roofs, thus reducing
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,
13 reducing the amount of potable water needed, providing
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 climate change impacts, including increased storm
18 intensity, flood potential, and impacts on the quantity of
19 surface and ground water supplies.

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

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

1 is reduced when trees and other vegetation are present.

2 (9) Health Benefits. Studies show that people who have
3 access to the open space provided by green infrastructure
4 in their communities get more exercise, live longer, and
5 report better health in general. Exposure to green
6 infrastructure (even through a window) improves mental
7 functioning, reduces stress, and reduces recovery time
8 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, landscapers, nurseries, and related
13 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)
18 operating and maintenance expenses for treatment plants,
19 pumping stations, pipes, and other hard infrastructure;
20 (iii) energy costs for pumping water; (iv) costs associated
21 with treatment during wet weather; and (v) costs of
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

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

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

10 (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
18 regulatory programs and methods and feasibility of integrating
19 a State program with existing and potential regional and local
20 programs in Illinois;

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

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

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

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