

# Green Roofs

Webcast Conference  
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Katrin Scholz-Barth



# Katrin Scholz-Barth

## Philosophy

- Functional Landscapes for Runoff Reduction
- Tiered Approach for Maximum Return
- Minimal Layers for Cost Effectiveness



# Katrin Scholz-Barth

## Green Roof Projects

- Federal Reserve Bank of Richmond
- Harvard Graduate School of Design
- O'Hare Airport: 15 Acres of Green Roofs
- Queens Botanical Garden: Construction Admin
- The World Bank and DOI: Feasibility Study
- National Institute of Health: Specs and CA



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# Katrin Scholz-Barth

## Services

- ⑥ Design Charrettes to define Design Goal
- ⑥ Design and Specifications
- ⑥ Construction Administration
- ⑥ Training
- ⑥ Grant Writing

# Why Green Roofs?



Courtesy Re-Natur, Germany

Challenge Conventional Thinking

Incorporate Natural Functions

Lower Runoff

Increase Insulation

Lower Operating Costs

Increase Profits



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# Philosophy

## Montgomery Park Business Center



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# Public Image



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# Access and Recreation

Takoma, DC



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# Aesthetics



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# Backyard Habitat



Courtesy Re-Natur, Germany

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# Education



Courtesy Re-Natur, Germany

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# Education



Harvard University  
Graduate School  
of Design



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# Understanding the Issues

## Hydrological Cycle in Urban Areas

15%  
Evapotranspiration

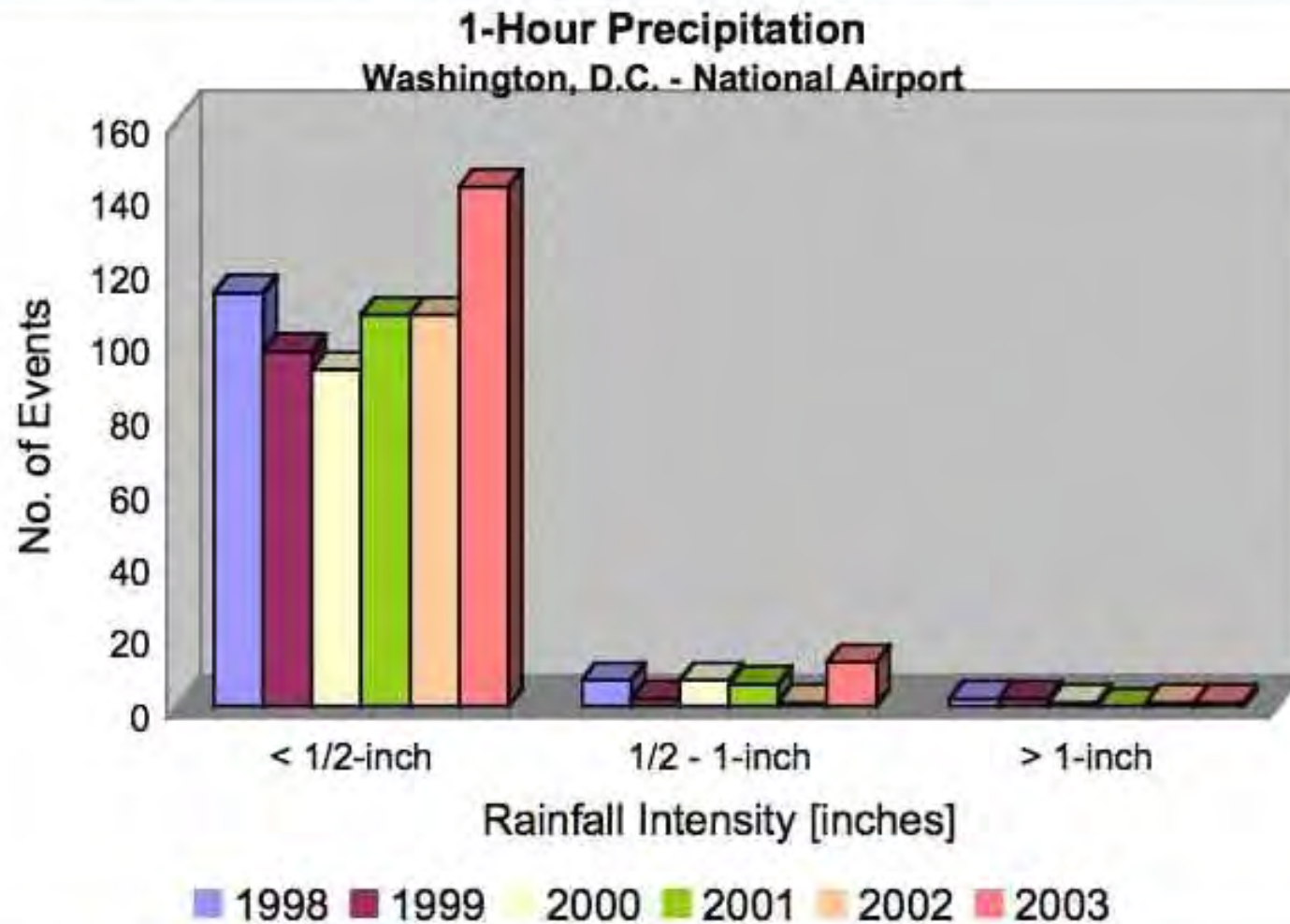


75% Runoff

5% Infiltration

Courtesy Bauverlag, Germany

# Stormwater Runoff



Source: National Weather Service

# ... and Consequences



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# ... and Consequences



Courtesy Prince George's County, MD

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# Easy as Child's Play



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Courtesy Re-Natur, Germany

# Example: Residential

## DC Townhouse



3 Weeks old



10 Weeks old



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# Example: Government

National Institutes  
of Health



Gateway  
Center



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# Example: Government



National Park Service

Center for  
Urban Ecology



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# Many Opportunities



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# Plant Selection

Suitable Plants for  
the Environment!



Courtesy Re-Natur, Germany



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# Substrate



Gravel

80% Exp. Clay  
20% Topsoil

Exp. Clay



80% Gravel  
20% Topsoil

Topsoil

Mix of  
Compost,  
Clay, Sand

Courtesy Re-Natur, Germany

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# Maintenance



Weeding  
Watering  
Fertilizing



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# The Good News



Courtesy Re-Natur, Germany



... you can always  
start small



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# More Information

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**THANK YOU!**



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