

Second place

CATEGORY

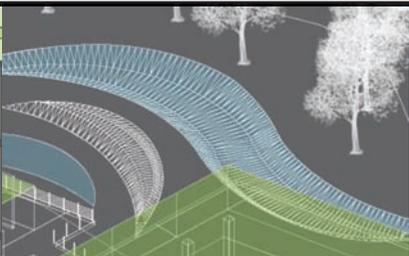
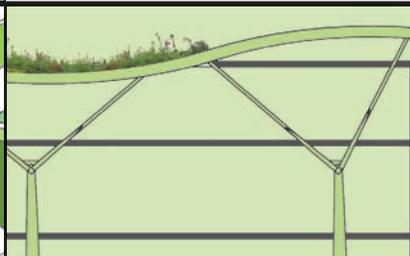
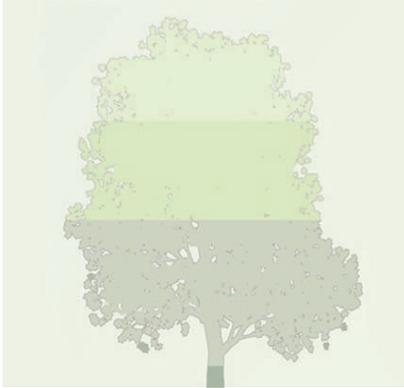
2

Nature in Neighborhoods:  
Integrating Habitats Winners Series

Commercial development and lowland hardwood forest

# Landscape Decompression

Habitat Rebound



Put walls to work

Balance maximizes benefits

Biomimicry: nature as a role model

Serpentine seasonal wetlands

Beautiful big box?!

Elevated trails

New places for parking





# Snapshot of a winner

*Landscape Decompression* explores how traditional commercial development approaches can be reinvented to capitalize on unique site characteristics, reduce hardscape expenses and create adaptable commerce areas that educate and inspire. Compressing the building footprint allows natural systems and native species to rebound and rejuvenate. High-quality habitat areas are allowed to ‘decompress’ and expand, enhancing the site and improving the visitor’s experience.



## ③ Biomimicry: nature as a role model

As this development strategy compresses the human footprint, built systems begin to emulate natural systems. The building structure adapts characteristics of a forest canopy and understory, with stratified vertical systems that provide natural shading and cooling effects. Paved areas like parking lots are permeable and act like native soils and vegetation, absorbing and cleaning stormwater before it collects in the lowland habitat areas.



## ⑤ Beautiful big box?!

When entering the site, visitors pass near a green, vegetated habitat corridor. In addition to preserving the existing habitat, the development created new habitat areas that add to a beautiful, natural setting.

**Landscape decompression:**  
Traditional development creates a compressive effect on the landscape. Decompression can initiate habitat rebound and expansion

### Inhabitant profiles



Wapato flowers, killdeer nest, spike-rush sedge



## ② Balance maximizes benefits

This design successfully balances development, human needs and the health of natural systems. Striking this balance means incorporating innovative site and building strategies that preserve functioning habitat rather than speed its rapid loss and bringing the multiple benefits of natural ecosystem services to our communities rather than costly ‘pave and pipe’ installations that serve single, narrow functions.

“By breaking apart the big box, they’ve created a wonderful environment where people who shop here can actually enjoy nature around them.” – Susan Szenasy, jurist

“The designers were thinking not only about what’s going to happen when the big box arrives but also what’s going to happen when it leaves. To anticipate the retrofit is part of the real intelligence.”

– Brook Muller, project advisor



## ⑥ Elevated trails

The two commercial structures on site are connected by a raised pedestrian and bicycle trail, which allows smaller wildlife to pass underneath, provides cover and accommodates seasonal flooding.

## ① Put walls to work

The buildings take cues from nature to increase energy efficiency. Living walls, along with green roofs, are not just decorative — they provide thermal insulation, clean the air, reduce energy use, and provide additional links between the home building center and surrounding habitat. As a result, visitors and customers have wildlife viewing opportunities and an enhanced ability to recognize the benefits these green features provide.



## ④ Serpentine seasonal wetlands

The preserved wetland habitat area that winds through the development is easily viewed from numerous locations. Over the course of the year, visitors can see how the wetlands expand and recede and watch the species that migrate through the site from season to season. These areas will provide vital breeding habitat for amphibians, as well as feeding, resting and nesting areas for birds.



## ⑦ New places for parking

Instead of large, impervious parking lots, the majority of the parking is provided in a unique vegetated parking structure or tucked away under buildings.

## Landscape decompression needed for habitat rebound

By taking cues from native species, mimicking the functions and services of regional ecosystems, adopting the characteristics of existing local habitats, and filling the gaps in wildlife corridors with green infrastructure, the built environment — even something the size of a big box — can reduce its own footprint and absorb its impacts. Compressing these big box impacts initiates and supports landscape ‘decompression.’ This decompression allows habitats to rebound and expand ecological functions to be restored. Networks of resilient habitat areas increase and air and water quality improves, as does overall watershed health.

Team member  
**Pennsylvania State University**  
Pennsylvania, Pa.  
**Ken Hendrickson**  
e-mail: kah1024@psu.edu

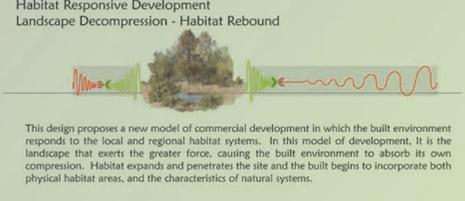
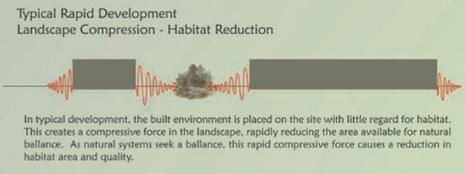
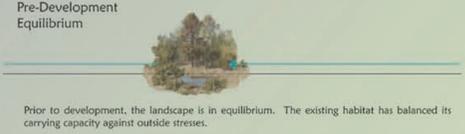
“From green roofs atop parking garages to creating pathways for shoppers to connect with nature, to storing rainwater, this proposal presents a real possibility for breaking out of the big box.”  
– Susan Szenasy, Jurist

Jurists  
**Stefan Behnisch**, principal Behnisch Architects Stuttgart, Germany and Venice, Calif.  
**Joan Nassauer**, professor Landscape architecture University of Michigan Ann Arbor, Mich.  
**Tom Schueler**, founder Center for Watershed Protection Ellicott City, Md.  
**Susan Szenasy**, editor-in-chief Metropolis Magazine New York, N.Y.  
**Jim Winkler**, president Winkler Development Corporation Portland, Ore.  
**David Yocca**, director Conservation Design Forum Elmhurst, Ill.

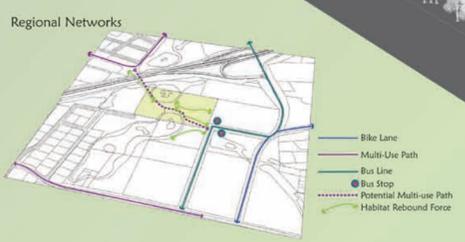


Nature in Neighborhoods: Integrating Habitats Winners Series

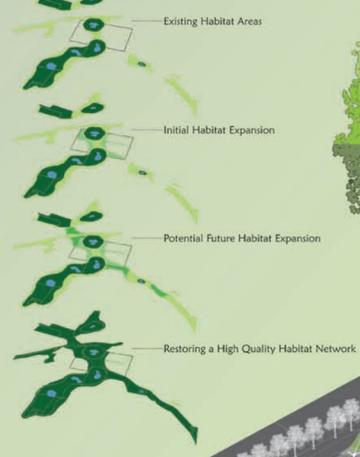
### Decompress I



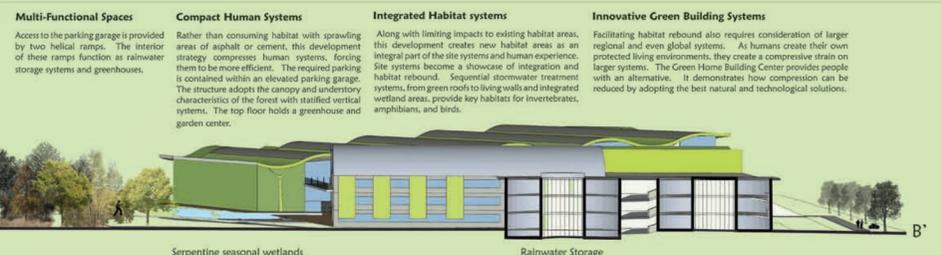
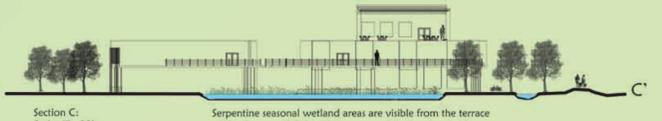
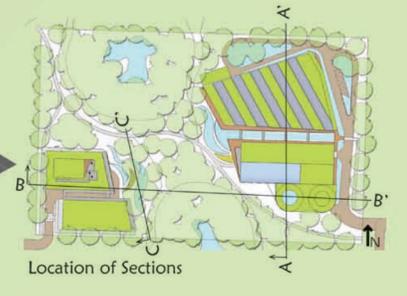
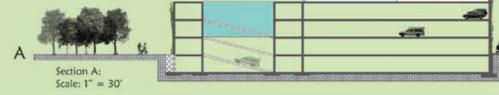
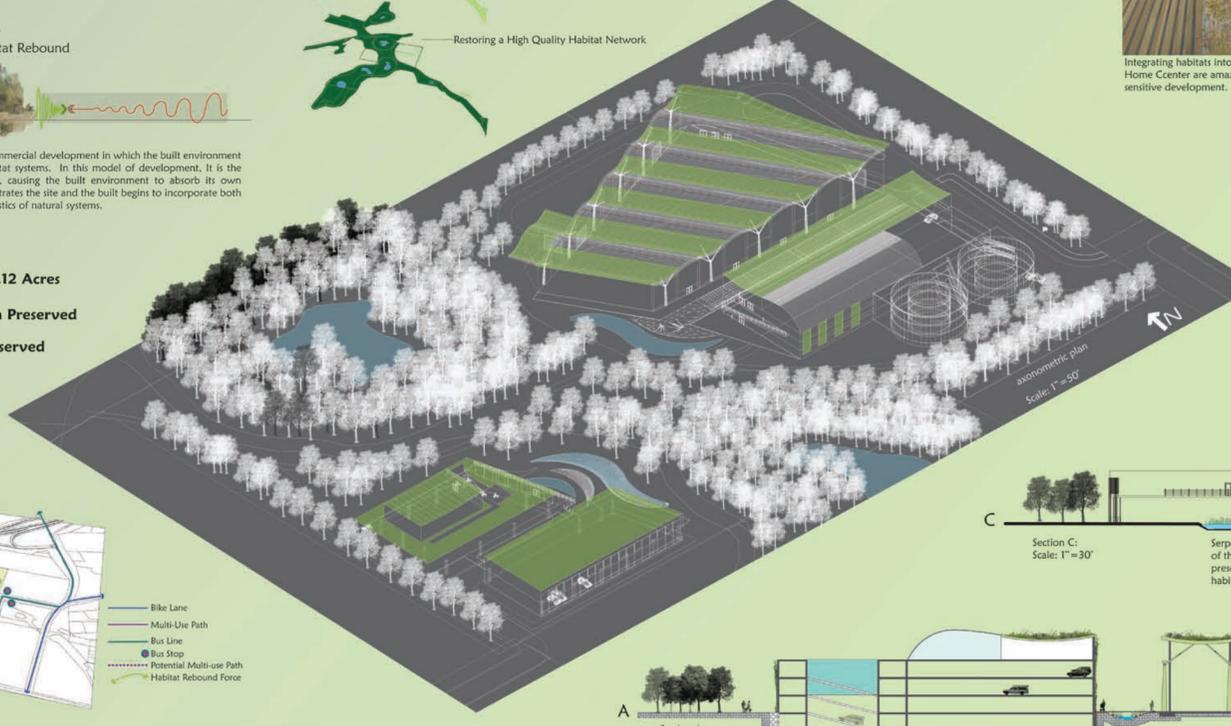
**Existing Site: 10.66 Acres**  
**Habitat Area Protected: 5.12 Acres**  
**48% of the Total Site Area Preserved**  
**100% of Habitat Area Preserved**



### Expand



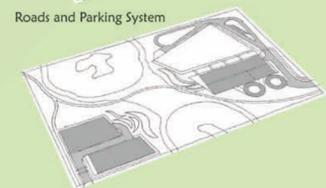
create energy, absorb and evapotranspire rainwater, filter the air, create shade, sequester carbon, provide food and shelter



### Program



Parking for the Greenroof Cafe', Eco-Rags, and Willamette Cycles is located under the buildings, but most people choose to ride their bicycle because the trail system is so close. The Cafe' makes a good stopping point to grab a cup of coffee or a sandwich and take in the view.



### Inhabitant Profiles

This site is inhabited by thousands of species, from microorganisms to large oaks... from salamanders resting at the edge of still pools, to Heather, adjusting the brakes on Dr. Allison's bicycle at Willamette Cycles. They are all connected, inextricably linked in the web of life. This site values and celebrates each link and tries to communicate that value to everyone who enters the site.

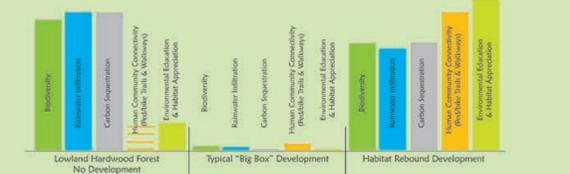
The businesses here share a common goal of reducing their footprint and helping to repair and restore habitat systems rather than displace and disrupt them. The best part is that their customers appreciate this value system.

The local communities love this site. The new trail adds safe and enjoyable links to the pedestrian and bicycle systems expanding the network. Instead of a commercial development, this site feels like a park.

Birds and mammals thrive in the lowland hardwood forest. New corridors allow for movement of larger species and it is not unusual to see deer or fox moving through the site.



Key indicators of habitat health and water quality, aquatic invertebrates and amphibians thrive in the created wetland. Multiple levels within the wetland, pools, and vegetation provide areas for breeding and feeding.



## Metro regional government

serves 1.4 million people who live in the 25 cities and three counties of the Portland metropolitan area. Metro's Nature in Neighborhoods initiative brings the regional government and local jurisdictions together to help ensure that the region's wildlife and people thrive in a healthy urban ecosystem.

### Metro Council

David Bragdon, President  
Rod Park, District 1  
Carlotta Collette, District 2  
Carl Hosticka, District 3  
Kathryn Harrington, District 4  
Rex Burkholder, District 5  
Robert Liberty, District 6  
Suzanne Flynn, Auditor



600 NE Grand Ave.  
Portland, OR 97232-2736  
[www.oregonmetro.gov](http://www.oregonmetro.gov)

PRSR STD  
US POSTAGE PAID  
PORTLAND OR  
PERMIT NO. 1246

## Co-hosts, partners and sponsors



Newland Communities • KPFF  
PB • Otak • ESA Adolfsen

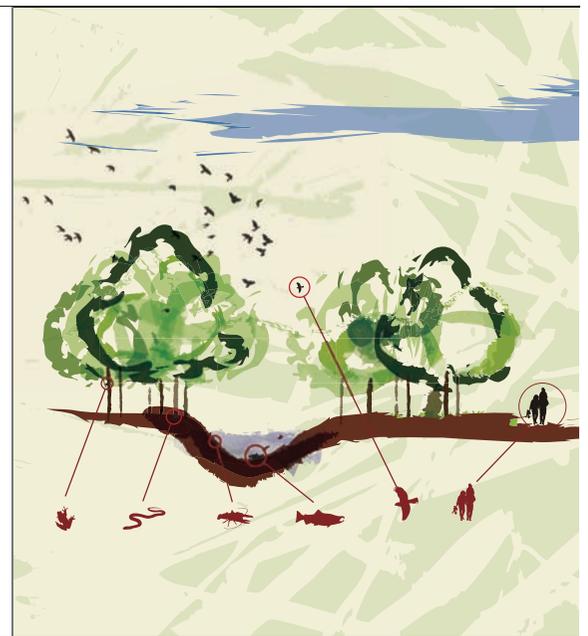


## Nature in Neighborhoods: Integrating Habitats Winners Series

### Blend. Balance. Integrate.

Collaborate to redefine the built environment and restore nature.

More than 100 teams from around the world submitted entries to the Integrating Habitats design competition, proving that every space in which we live, work, shop and play can create places for both people and nature. These designs redefine current standards of environmental sustainability. The award winners illustrate new types of nature-friendly designs that balance development, human needs and the health of natural systems we all depend upon.



[www.oregonmetro.gov/integratinghabitats](http://www.oregonmetro.gov/integratinghabitats)

“Urbanism will change, real estate development will change, landscape architecture, architecture. All have to change.” — Joan Nassauer, jurist