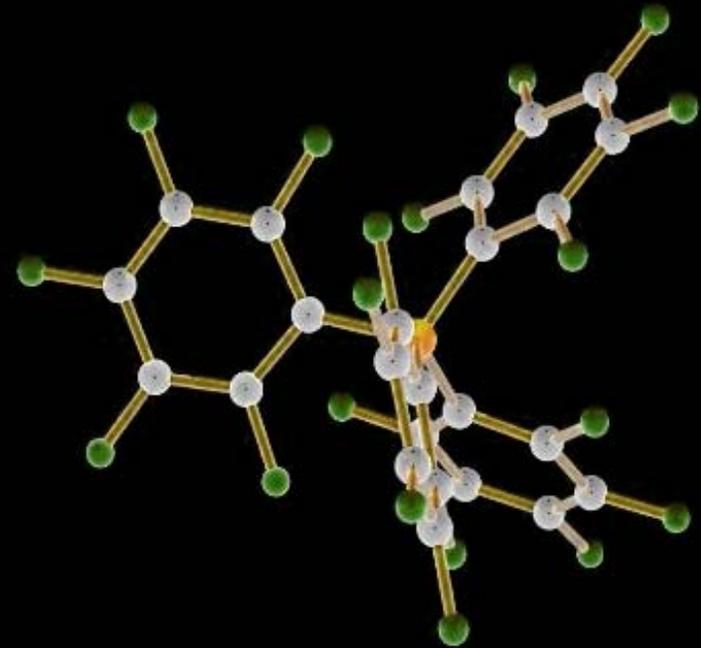


HIGH PERFORMANCE LANDSCAPES: green infrastructure for healthy communities



Nate Cormier, ASLA, LEED AP
Senior Landscape Architect
SvR Design Company



+



defining green infrastructure, from the site to the city to the region

Snoqualmie River
Fall City, Washington

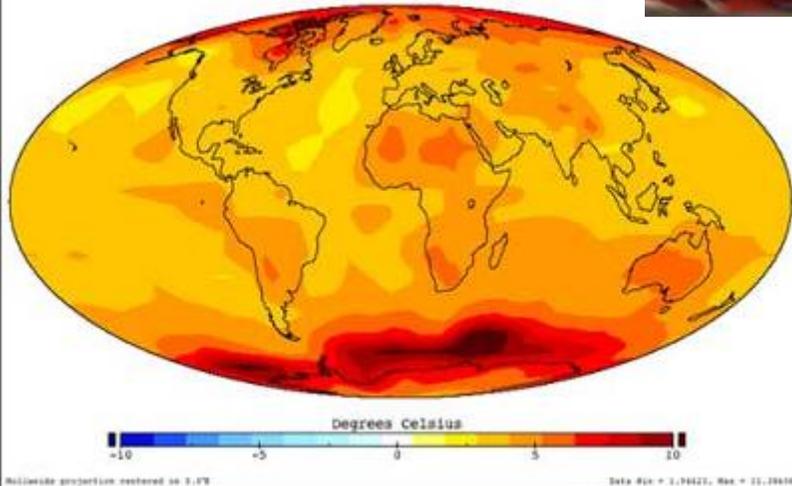


Jamison Square, Portland, Oregon,
Peter Walker & Partners

nature "out there" and nature "nearby" are green infrastructure



Surface Air Temperature Increase 1960 to 2060



but we can push the green infrastructure approach even further, to explicitly address profound urban environmental challenges



“the forms we conceive are really patterns, and patterns are the configuration of relationships between natural systems...” –David Miller

High Point public housing redevelopment, Seattle



Looking at any community...



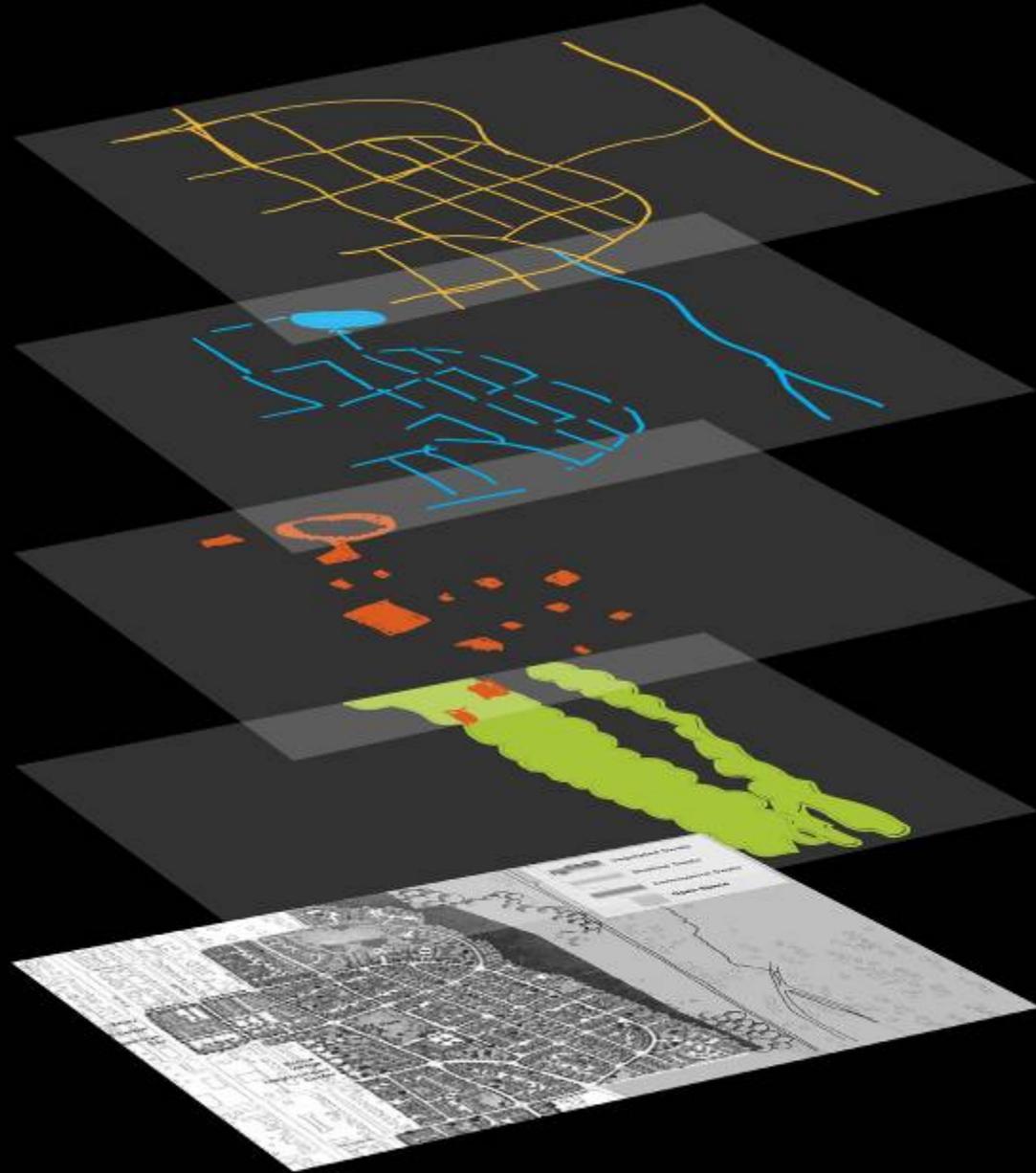
we can map its green infrastructure.

mobility

water

community

habitat



Peeling apart a series of green infrastructure systems like layers and looking at their constituent parts...

4T Trail	4CS Complete Street	4GS Green Street	4TC Transit Connection	4Bw Blueway	4BL Bike Lane	4W Woonerf	4Gw Greenway
3RG Rain Garden	3Bs Bioswale	3SP Stormwater Planter	3Wp Wetpond	3Dp Drypond	3CW Constructed Wetland	3GR Green Roof	3Ci Cistern
3FS Filter Strip	3PP Porous Pavement	2P Park	2HG Home Garden	2Wp Workplace	2TP Third Place	2Sy Schoolyard	2SG Streetside Garden
2CG Community Garden	2HL Hazard Landscape	2EL Energy Landscape	2WL Waste Landscape	2F Farm	2R Ranch	1UW Urban Wild	1WI Wetland
1SI Shoreline	1WC Wildlife Crossing	1RC Riparian Corridor	1BH Backyard Habitat	1Gb Greenbell	1UF Urban Forest		

reveals a table of green infrastructure elements.



integrated systems form of a green infrastructure network, the hardest working parts of that network are its high performance landscapes

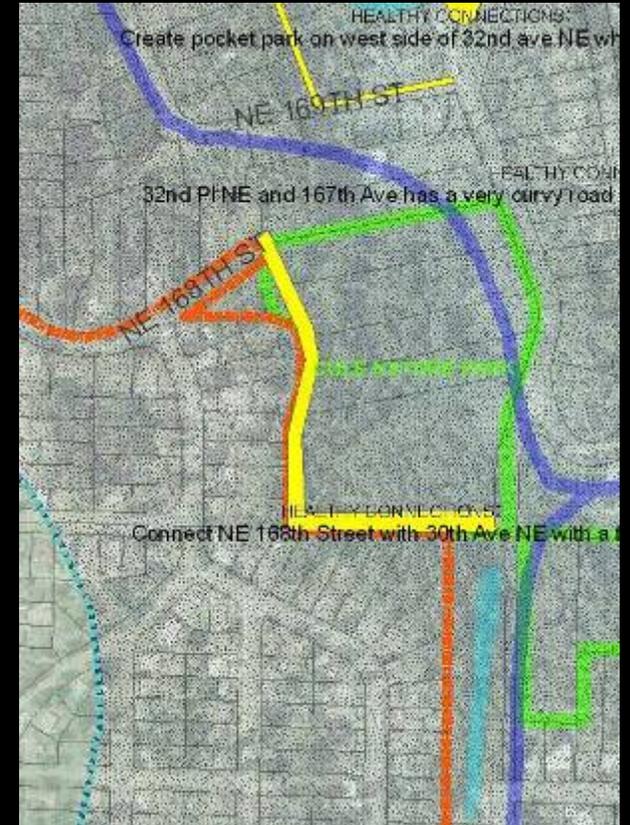
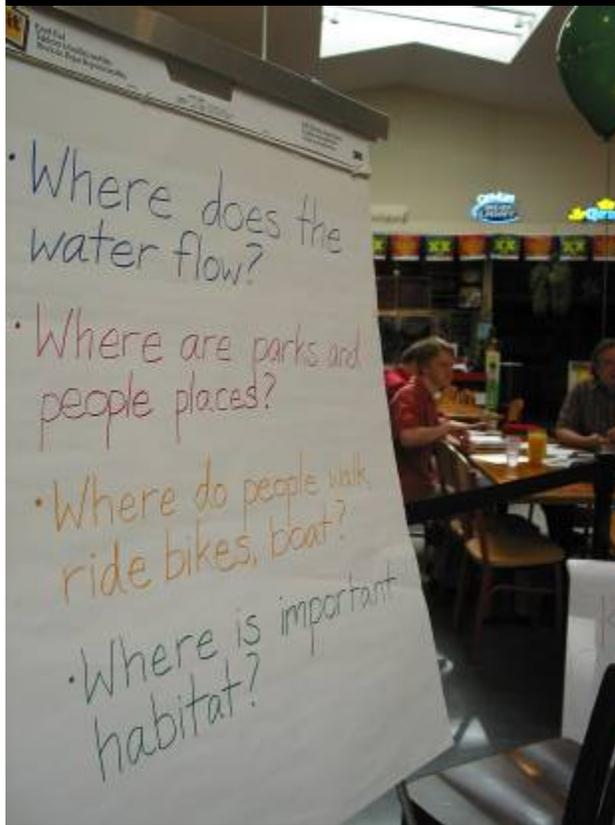
led by Nancy Rottle of the University of Washington and Brice Maryman of SvR



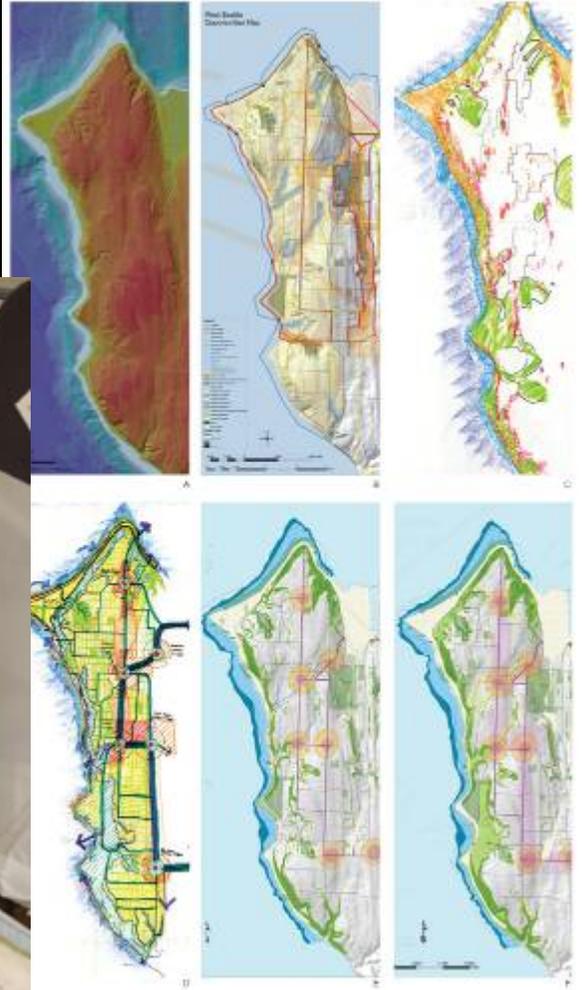
GREEN INFRASTRUCTURE PLANNING



SvR with Jones & Jones for Lake Forest Park, Washington



what are your existing green infrastructure elements?
what is missing? what would make the system whole?



watershed by watershed, system by system

2025 GREEN INFRASTRUCTURE COMPOSITE



- Parks & Community Space
- Urban Centers
- Water Intervention
- Green Transport Corridor
- Habitat
- Existing Park

These 25- and 100-Year Plans for Seattle's Green Infrastructure represent the combined work of all twenty-three Green Future Charrette teams. UAF student leaders created digital maps of each team's ideas for their individual study areas, which were then joined together to create these all-city plans. GIS composite drawings by Betty Severson.



Parks & Community Space 2025



Habitat 2025



Green Transport Corridors 2025



Urban Centers 2025



Water Interventions 2025



Seattle and Lake Forest Park's Green Infrastructure Plans

A2. Town Center

PROJECT LOCATION:

main hub @ intersection of main Creekways and Arterial Green Streets



VISIBILITY: high

CHALLENGE: high



POSSIBLE PROJECT ELEMENTS:

Habitat

- create a wider riparian buffer and remove fish blockages at 522 and under Town Center
- daylight Lyon Creek through the parking lot

Community

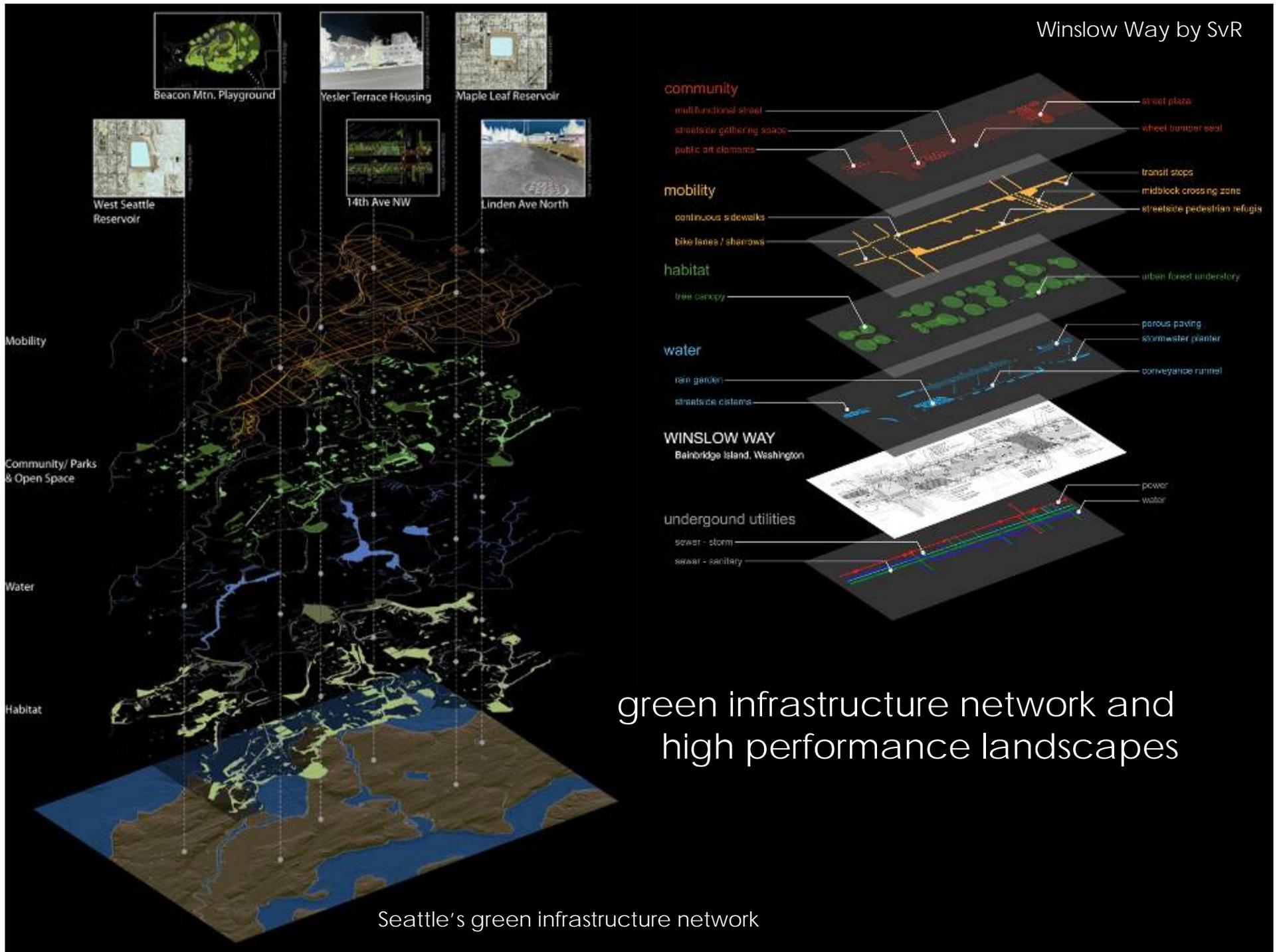
- create high-density, mixed-use, transit-oriented development
- create a central civic space for community

Water

- use bioswales, green roofs, and other LID features to manage parking lot run-off

Mobility

- improve sidewalks and crosswalks to connect neighbors to Town Center
- create trail along Lyon Creekway (start of connection between BG and Interurban)
- park & ride facility



Winslow Way by SvR

community

- multifunctional street
- street plaza
- wheel bumper seal
- streetside gathering space
- public art elements

mobility

- continuous sidewalks
- transit stops
- midblock crossing zone
- streetside pedestrian refugia
- bike lanes / sharrows

habitat

- tree canopy
- urban forest understory

water

- rain garden
- streetside cisterns
- porous paving
- stormwater planter
- conveyance tunnel

WINSLOW WAY

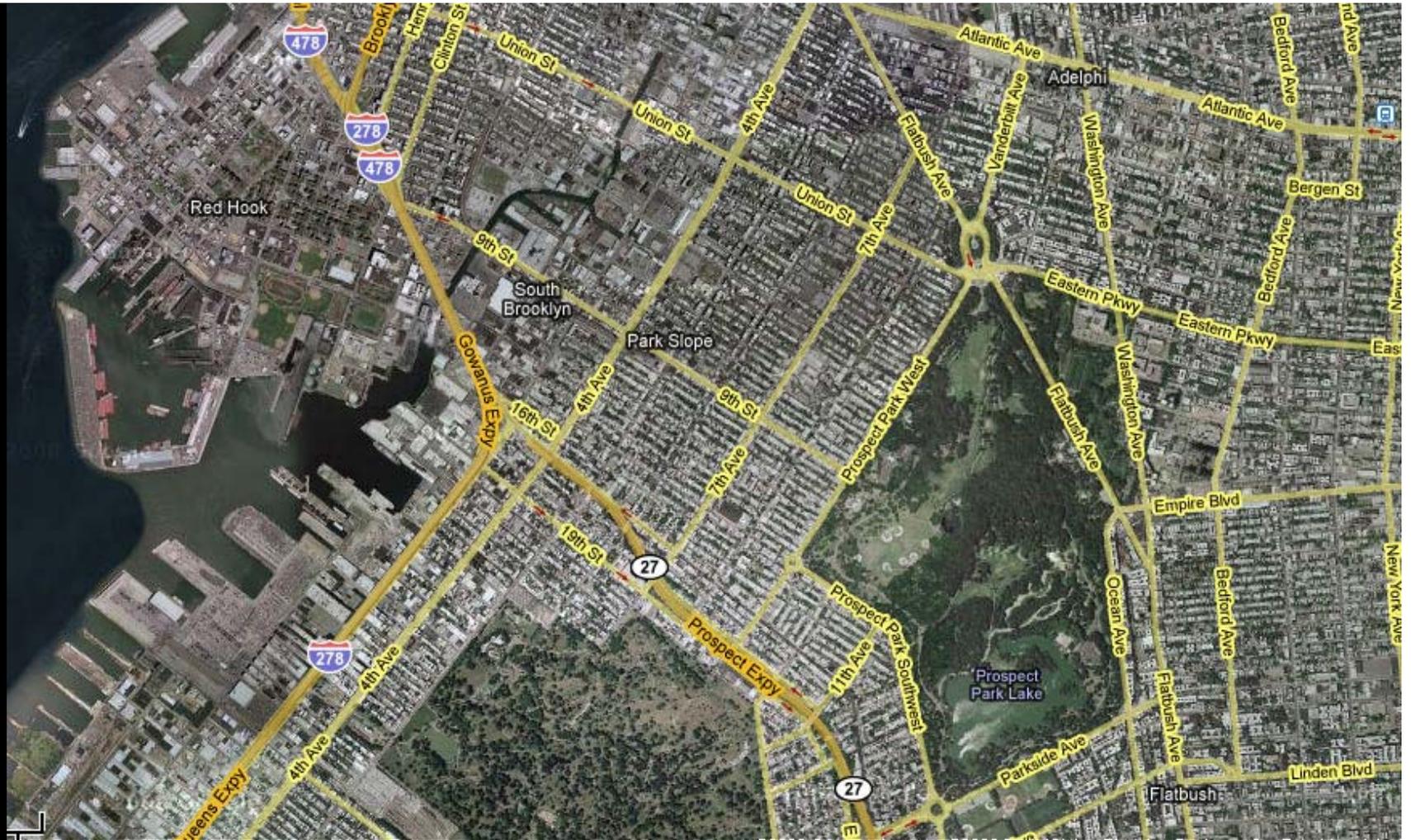
Bainbridge Island, Washington

underground utilities

- sewer - storm
- sewer - sanitary
- power
- water

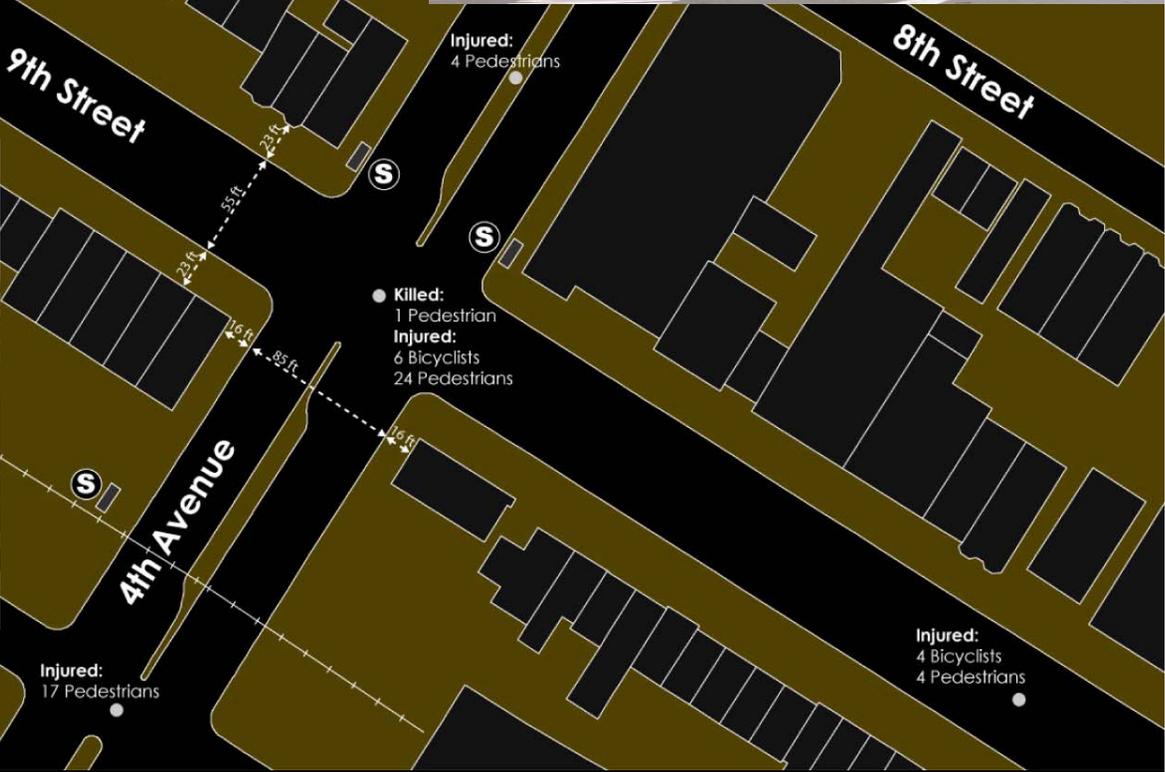
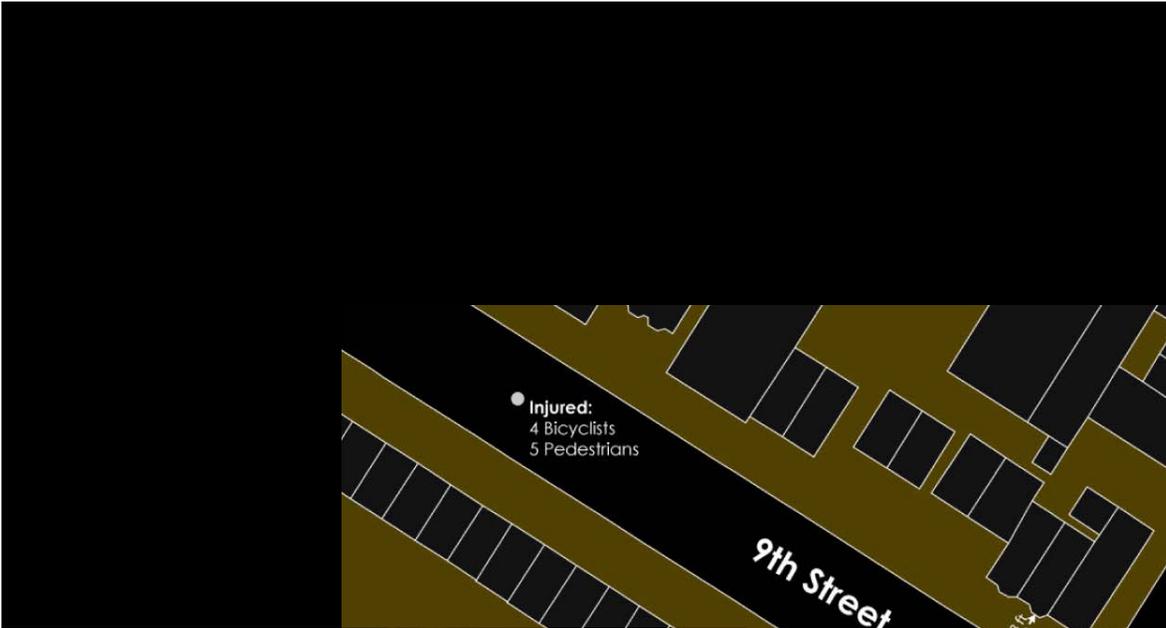
green infrastructure network and high performance landscapes

Seattle's green infrastructure network

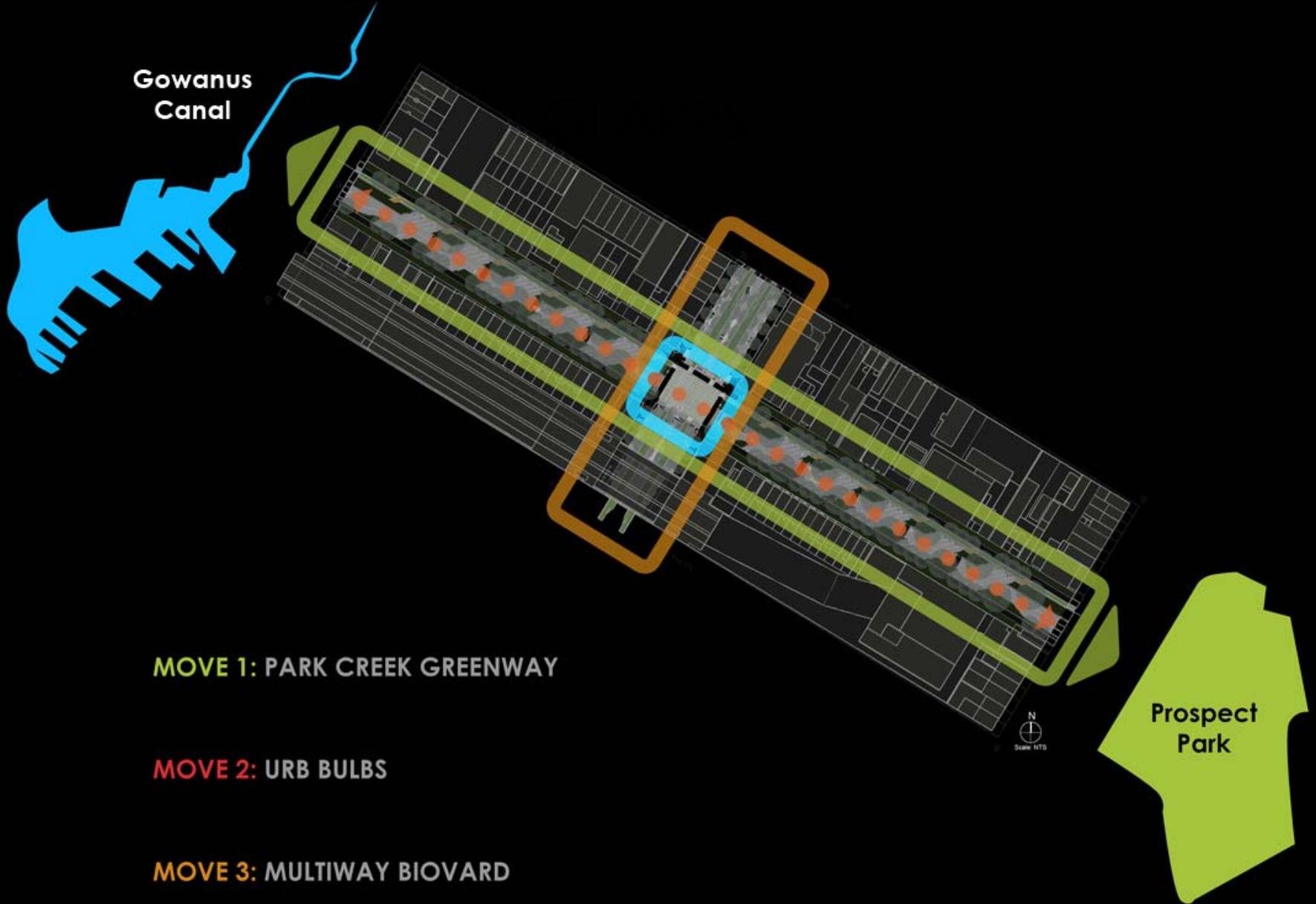


Designing the 21st Century Street, Brooklyn, New York

HIGH PERFORMANCE LANDSCAPE DESIGN



4th Ave. is a major commercial through route, 9th St. is more residential



Gowanus
Canal

MOVE 1: PARK CREEK GREENWAY

MOVE 2: URB BULBS

MOVE 3: MULTIWAY BIOVARD

MOVE 4: CONFLUENCE

Prospect
Park

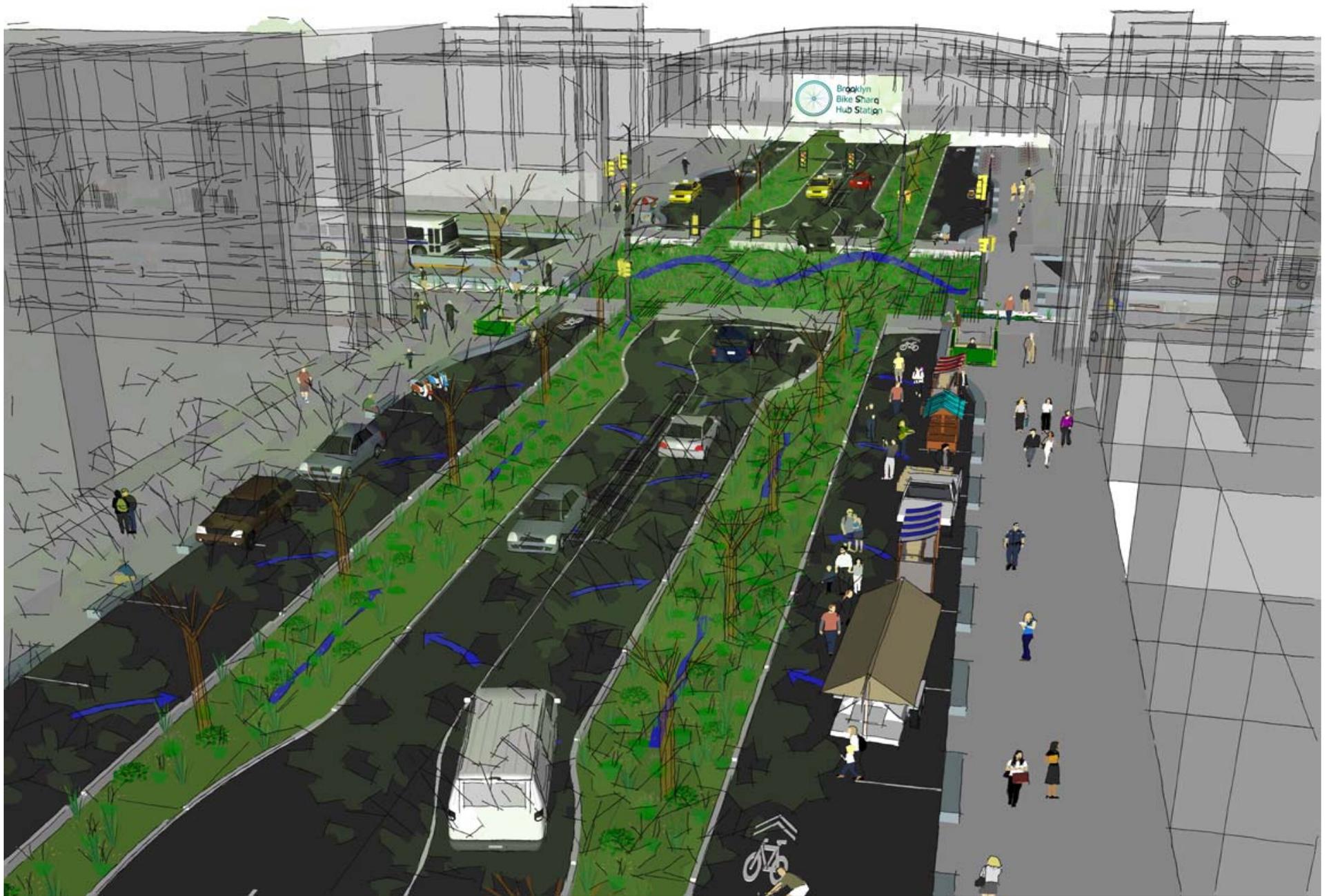




park creek greenway



urb bulbs



multiway biovoad



the confluence

Growing Vine Street, SvR
with Buster Simpson and Carlson Architects



towards an aesthetic of performance



www.SvRdesign.com



Seattle needs good parks.

It's up to you. Vote **YES** on Proposition 2.



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Highlights



Open Spaces

\$45 million for neighborhood parks and greenbelts

More open spaces, new trails and the completion of the Burke Gilman and Duwamish Trails to promote active and healthy living in Seattle.

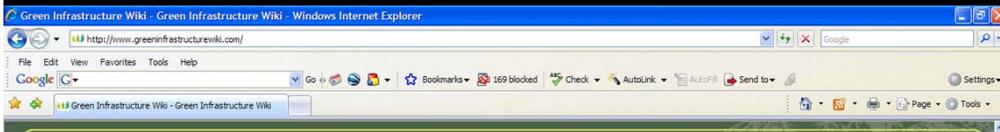
Welcome to Parks and Green Spaces Levy Community

[Sign Up](#) or [Sign In](#)

Parks and Green Spaces Levy Community Badge

[Parks and Green Spaces Levy Community](#)

www.seattleparksforall.org



Green Infrastructure Wiki

Search this wiki

- Home
- Case Studies
- Layer 1: Habitat
- Layer 2: People Places
- Layer 3: Natural Drainage
- Layer 4: Healthy Connections

WELCOME TO THE "OPEN SOURCE" GREEN INFRASTRUCTURE MOVEMENT!
Please feel free to add content directly or make suggestions for future refinements via the comment feature. Page templates are available if you want to add new green infrastructure elements and case studies. It is our hope that this will grow into a shared resource for a multi-disciplinary movement. We hope you find it helpful and thanks for your contribution.

A WORKING DEFINITION
The term "green infrastructure" has been used to describe a vast array of landscape types, from backyard rain gardens to regional open space networks. Fundamentally, green infrastructure is just a framework for recognizing the valuable ecological services that nature can provide for the human environment. At a metropolitan scale, green infrastructure forms a tapestry of open space that serves and guides urban development. At a site scale, green infrastructure connects a place to its bioregional context, integrates functions, and makes life-giving processes visible and meaningful. Regional protected and connected natural habitats are the foundation for this system. Parks, gardens, trails, and other traditional public spaces link communities to this natural landscape matrix. More broadly conceived, a green infrastructure network is a regenerative solution to urban challenges associated with stormwater and waste management, mobility and public health, local food and energy security, and even protection from natural and man-made hazards.

TABLE OF ELEMENTS
Green infrastructure needs a conceptual framework that can accommodate the range of scales and functions described by the term. Every emerging field must codify its underlying patterns and principles. Biology has scientific classification

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- 2P: Park** by botanman May 12, 9:31 PM EDT
- 3GR: Green Roof** by botanman May 12, 9:09 PM EDT
- Green Infrastructure V** by botanman May 9, 2:16 PM EDT

Green Infrastructure Wiki

Conservation Neighborhood Habitat Corridor
10 green homes in coastal Maine. Sustainable living at its best.
www.OldWoodFarm.com

Sustainable Development Involved in land development? See this free online and print magazine
www.SLDOnline.com

Their Town: Paradise Lost
Urban Revitalization in America A Book by Charles Adian
Photo:www.paradiselost.com

ITC										
SYSTEM 2: COMMUNITY										
2P	2RL	2Wp	2TP	2Sy	2SG	2PA	2IR			
Park	Residential Landscape	Workplace	Third Place	Schoolyard	Streetside Garden	Public Art	Intersection Plaza			
2CG										
Community Garden										
SYSTEM 3: WATER										
3RG	3Ba	3SP	3Wp	3Dp	3CW	3GR	3GI			
Rain Garden	Bioswale	Stormwater Planter	Wetpond	Drypond	Constructed Wetland	Green Roof	Cistern			
3FS	3PP	3GA								
Fiber Strip	Porous Pavement	Green Alley								
SYSTEM 4: MOBILITY										
4T	4CS	4GS	4TC	4Bw	4BL	4W	4Gw			

http://www.greeninfrastructurewiki.com