



Open Space Seattle: 2100

Designing Seattle's Green Network for the Next Century

MAPS

EXISTING PLANS

INCLUSIVE NEEDS

SYSTEMS

TYOLOGIES

**IMPLEMENTATION
MECHANISMS**

Systems and Structures for Livable Cities

**Report to the Guidance and Executive Committees
December 13, 2005**

**University of Washington
Landscape Architecture 561
Professor Nancy Rottle**



Mapping

POPULATION AND
EMPLOYMENT
DENSITY

URBAN VILLAGES

HABITAT

CREEK BASINS

ZONING

TRANSIT NETWORK

LAND USE

NEIGHBORHOOD
PLANNING AREAS

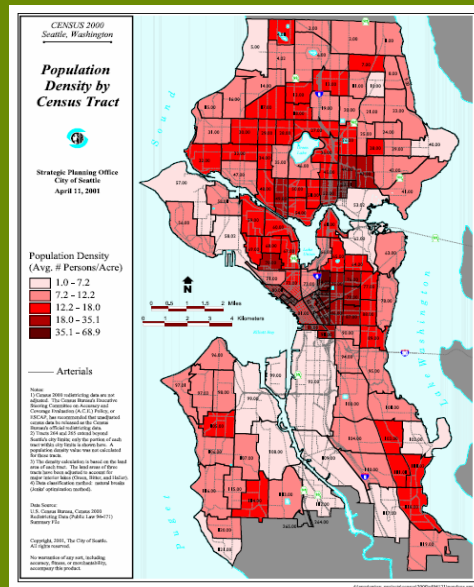
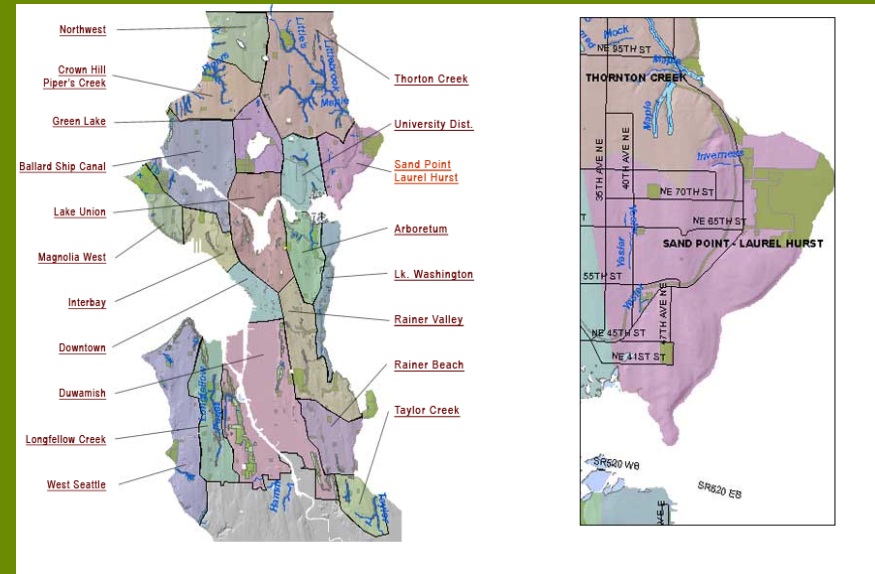
MEDIAN
HOUSEHOLD
INCOME

INDIVIDUALS
LIVING BELOW
POVERTY LEVEL

RACE RELATED
DEMOGRAPHICS

AMONG OTHERS

Watershed Delineations



Map Collection



Existing Plans

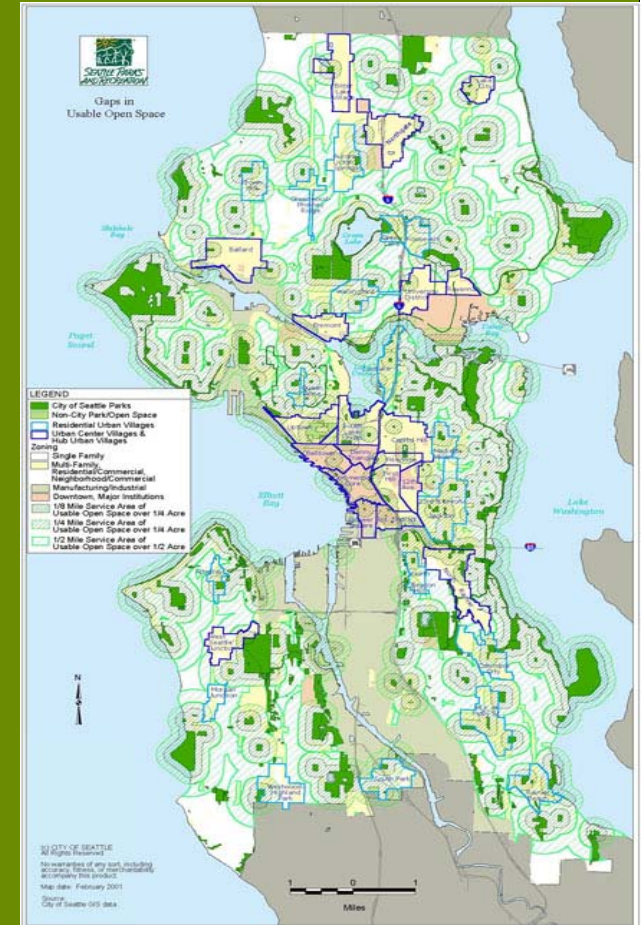
PARKS AND
OPEN SPACE

NEIGHBORHOODS

ECOLOGY

TRANSPORTATION

Open Space Gap Report





Existing Plans

PARKS AND
OPEN SPACE

NEIGHBORHOODS

ECOLOGY

TRANSPORTATION

Seattle Neighborhood Plans





Existing Plans

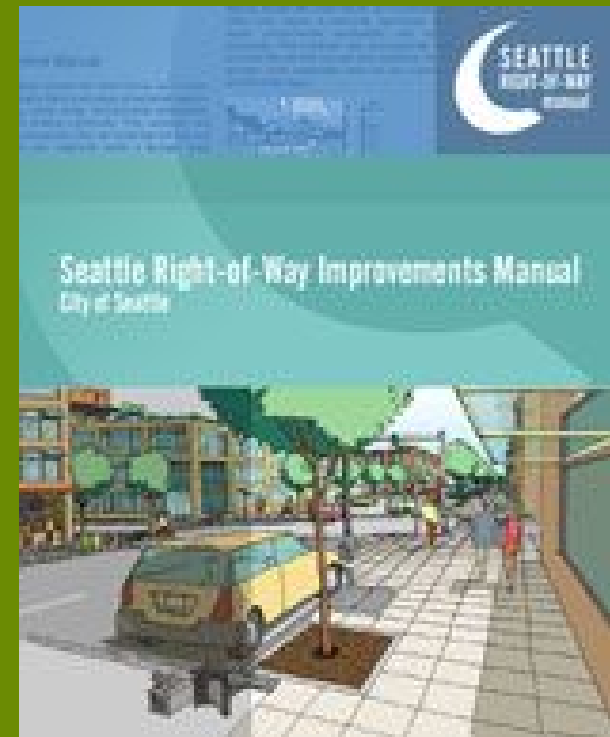
PARKS AND
OPEN SPACE

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Seattle Right of Way Improvements Manual





Existing Plans

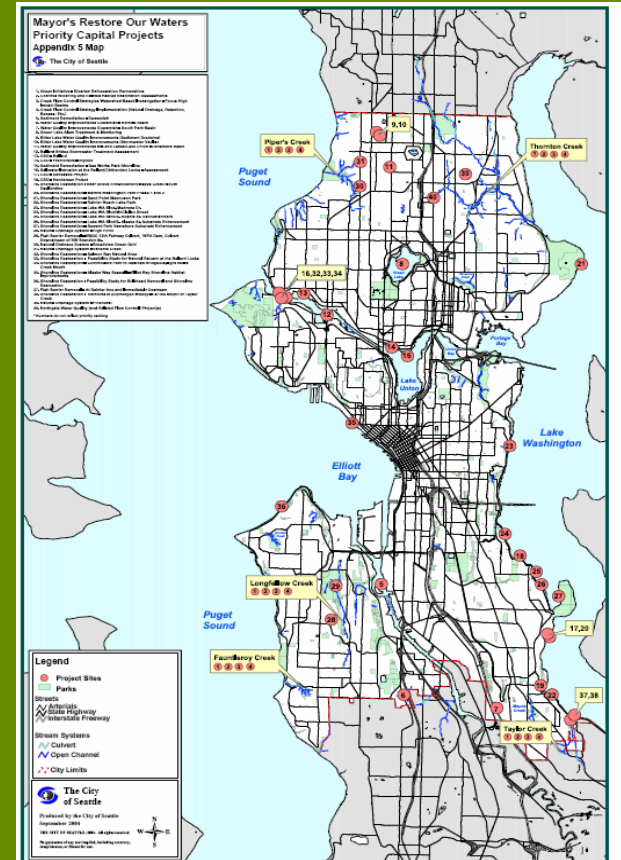
PARKS AND
OPEN SPACE

NEIGHBORHOODS

ECOLOGY

TRANSPORTATION

Restore Our Waters





Inclusive Needs

What is open space to you?

“places where there are moments for magic”

-Jourdan Keith

“places for just being together”

-Mercedes Cordova-Haleim

“it opens the mind and senses and allows for freedom”

-Erdris R. Syed R. Idrs

- Community Conversation Meeting, December 3, 2005

Groups

- Low Income
- Homeless
- Ethnic minority groups
- Children/Families
- Elderly
- Disabled



General Issues

•Health

Exercise and recreation for youth, non-toxic environment, safety

•Access

Transportation, cultural sensitivity, ADA, perception of safety

•Robustness

Designed for diverse groups/activities and large groups





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Community Conversation Meeting (December 3, 2005)

- Meeting arranged through Seattle Parks and Recreation.
- Begin conversation with diverse communities for 100-year plan for Seattle open space.
- Report will be available to incorporate into design process.

Issues Raised

- Importance of cultivating stewardship among youth and connecting open spaces to schools and neighborhood centers
- Using technology to activate spaces, encourage interaction and inform users of hidden processes
- Utilize non-traditional spaces (street-ends, traffic circles, sidewalks) as open space
- Provide open spaces that are comfortable for large family groups and cultural events





Open Space Precedents

Boulder

Chicago

Copenhagen

Minneapolis

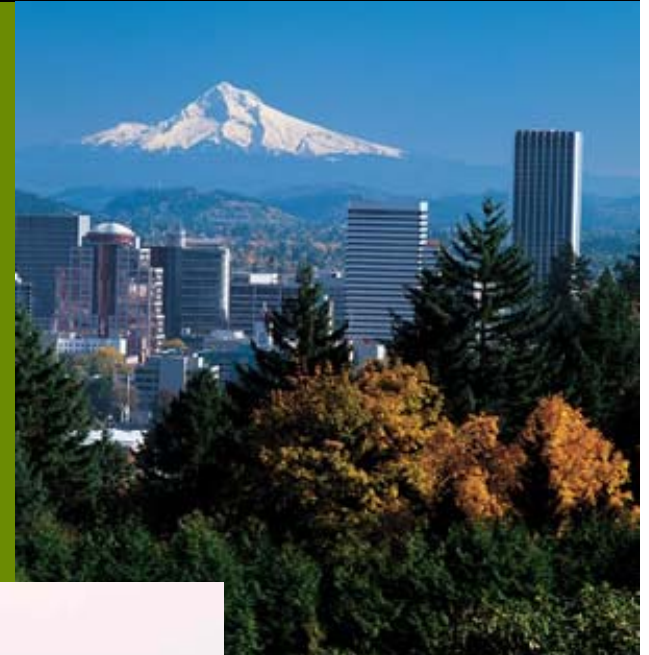
New York

Pittsburgh

Portland

San Francisco

Vancouver





Chicago Illinois

552 parks on more than 7000 acres

The nice thing is, if you improve the quality of life for people in your city, you will end up attracting new people and employers. Our quality-of-life measures helped attract new companies like Boeing.

-Richard Daley,
Mayor of Chicago

- **Anchors**
Grant Park, Gold Coast, Soldier's Field and Shoreline Parks
- **Connective Corridors**
Lakefront Parks, Boulevard between Washington & Jackson Park, Chicago River Trail
- **Recreational**
31 beaches, 5000 marina slips, Washington Park, Lincoln Park Zoo (with bike path), Navy Pier.



**Open Space System
CHICAGO IL**





Lessons Learned

As schools lost their effectiveness as community anchors, the same thing happened to parks, libraries and other public spaces. People stopped using them, and the City stopped taking care of them. Or maybe people stopped using them because the City stopped taking care of them.

- Richard Daley,
Mayor of Chicago

Open Space System
CHICAGO IL

- **Strong leadership** that is committed to sound environmental design and stewardship in public space helps urban civic pride (cyclical)
- **Improving the quality of life** of people in the city has attracted new residents and employers
- **Plans** only go so far – implementation is needed
- **Neglect of maintenance** has been a problem in past



Buckingham Fountain (Grant Park)



The Bean – Millennium Park



Minneapolis Minnesota

Horace W.S. Cleveland, a landscape architect whose work included New York's Prospect Park and Chicago's South Park Commission, conceived and designed a linear open space system for Minneapolis organized around natural hydrological systems (rivers, streams, lakes)

Notable Statistics

- System established in 1883 as independent board by state legislature. A semi-autonomous independent and citizen-elected branch of City government
- 6,400 acres of parks, 170 properties
- 10.2 acres per person, \$153 expended per capita, 382,618 people

Park Goals

- Environment
- Recreation
- Community



**Open Space System
MINNEAPOLIS MN**





Approaches

[The Minneapolis Parks and Recreation Board] can recapture the designs of Olmsted and Wirth, "perhaps America's finest urban open space network" while restoring 5,000 years of biological wisdom in this landscape, creating anew these "... spots of trees, as if planted by the hand of art for the purpose of ornamenting this natural splendid scene."

(W.R. Smith, 1837, in Curtis, 1959)

**Open Space System
MINNEAPOLIS MN**

- **BMPs and Environmental Monitoring**
- **No Net Loss of Parkland**
- **Riverfront Acquisition**
- **Linkages**
- **Economic Investment**
- **Public and private collaboration**



PHOTO: THE KESTREL DESIGN GROUP





Lessons Learned

Minneapolis Parks and Recreation Board received a 4-star rating in 2000 from Trust for Public Lands and was described as the “closest to park nirvana.”

**Open Space System
MINNEAPOLIS MN**

Will it work for Seattle?

Achievements

- Historic infrastructure of open space
- Original park plans rooted in appreciation of hydrological features
- Strong citizen involvement and support
- Logical and accessible linkages and multiuse
- Focus on environment both monitoring and acquisition

Challenges

- Budget shortfalls because of dependence on property taxes
- Temporary moratorium on new projects
- Delicate balance between private interests and public needs



Cedar
Meadows
Wetlands



PHOTO: THE KESTREL DESIGN GROUP

Stormwater Management at
Lake Harriet



New York City

Key Components

ANCHORS

- Central Park
- Prospect Park
- Battery City Park
- Waterfront Park System
- Gateway National Recreation Area
- Van Cortland Park

CONNECTIONS

- parkways
- bike and greenway system (350 miles)
- waterfront park system
- river corridors

NEIGHBORHOODS

- includes 700 vacant lots transformed into gardens (112 – TPL)
(36 – NYC Parks)

Open Space System

NEW YORK NY

NYC Open Space Stats:

- serves 7,381,000 people
- 52,938 acres (26.6% of city)
- 7.17 acres per 1000 people
- \$41 per person



Estuary with 500+ miles of waterfront

ATLANTIC OCEAN



Waterfront Blueprint

Waterfront Blueprint Projects

- Hudson River Greenway
- Riverdale Station
- Dodge Dock
- Spuyten Duyvil Station and Penn Central Triangle
- Bronx River Revitalization

Open Space System
NEW YORK NY

Waterfront Park Alliance

(New York League of Conservation Voters)

- **35+ nonprofit organizations** in support of waterfront development
- Reviewed **100+ proposals**
- Focused on transformation of former industrial waterfront to diverse public spaces

Parks & Open Spaces

(greenways, piers, meadows, promenades)

Habitat preserves

Economic investment opportunities

- **3000 acres** of vacant city land on waterfront



<http://www.nylcv.org/Programs/WPC/blueprint/>



Major Components

CONNECTIVE
CORRIDORS

ANCHORS

NEIGHBOR-
HOOD
PARKS

CIVIC
SPACES

PORTLAND, OR



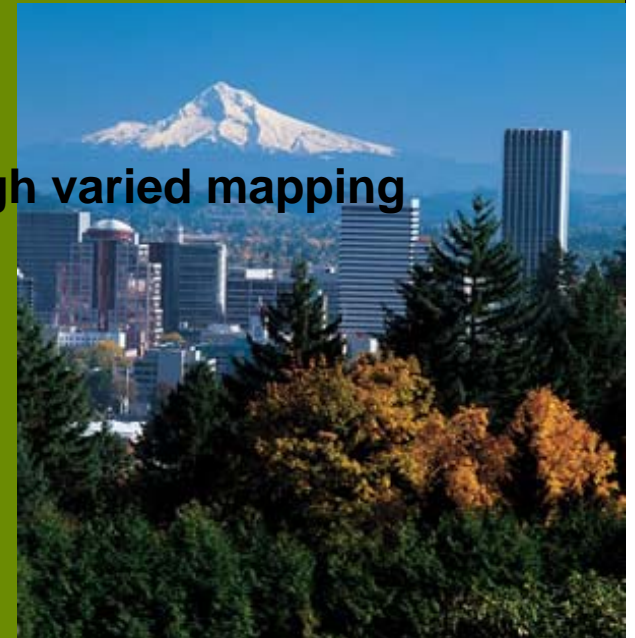


Urban Green Spaces Institute

Portland seeks "...a full spectrum of diverse, high-quality parks, open spaces, natural areas, recreation facilities and excellent education programs bring joy, fulfillment and growth to the lives of Portland's residents."

- **Integrate or "interdigitate" streams into city fabric**
- **Watershed analysis drives restoration priorities**
- **"Curbs are evil"**
- **Integration of urban environmental education through the City Nature Program**
- **Understand urban system through varied mapping scales**

**Open Space System
PORTLAND OR**





Vancouver, BC

Lively and Diverse by Nature

NOTABLE FEATURES

Vancouver Parks Mission

Provide, preserve and advocate for parks and recreation services to benefit people, communities and the environment.

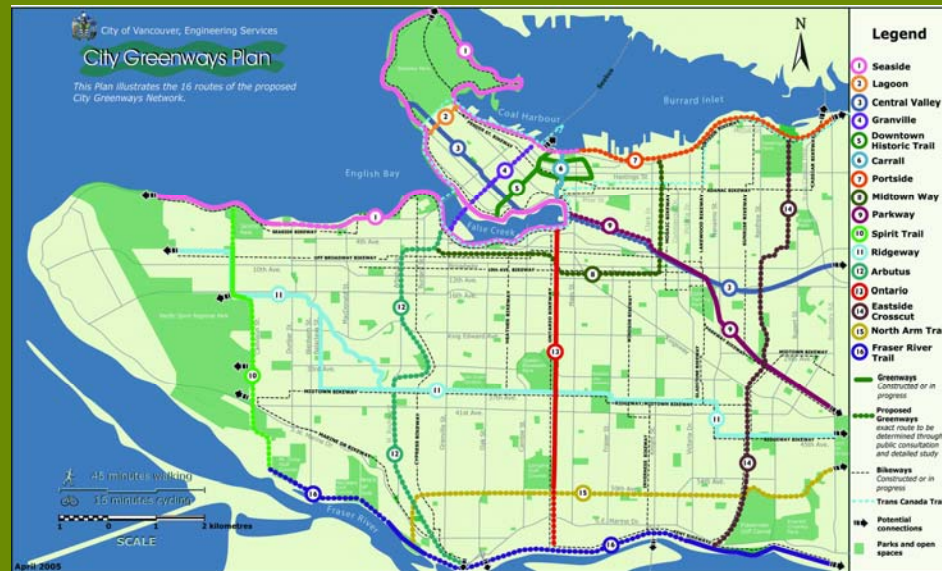
- Independently elected park board
- Community Amenity Contributions through rezoning
- Connective corridors at multiple scales



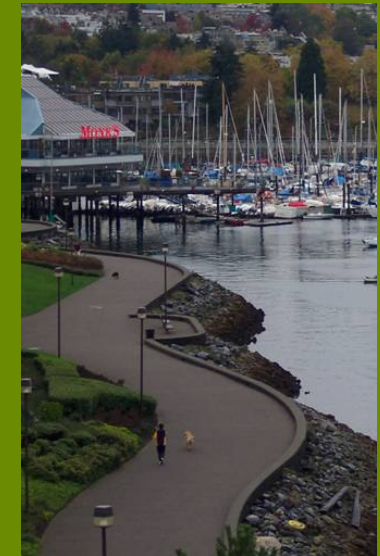
Roundhouse Community Center

Linkage of Schools, Community Centers and Parks

Open Space System
VANCOUVER BC



City Greenways Plan





What's Worked, What Hasn't

LESSONS LEARNED

"Few cities' possess such a combination of nearby natural resources, a splendid harbor, a terrain ideally suited for urban use, an equable climate, and a setting of great natural beauty."

- Harland
Bartholomew 1928

**Open Space System
VANCOUVER BC**

- Keeping waterfront space public vastly improves neighborhoods and is crucial to connectivity.
- Combine parks, community centers and schools to increase the value of each.
- Within an overall vision consider zoning of projects case by case in order to capitalize upon the unique aspects of particular sites for the public benefit.
- Density requires pedestrian connectivity and scale and downtown amenities. Increasing these, in conjunction with seeing congestion as an ally promotes downtown living.
- An independent parks board increases the significance of parks and improves system-wide coordination, but limits ability to integrate with other city initiatives.
- Connectivity is well-established in Vancouver but opportunities to establish urban ecology could be better exploited.



Open Space Precedents

Boulder

Chicago

Copenhagen

Minneapolis

New York

Pittsburgh

Portland

San Francisco

Vancouver





Open Space Types

Botanical Gardens

Community
Gardens

Environmental
Learning Parks

Green Structures

Habitat Corridors

Healing Gardens

Parking Strip
Gardens

Playgrounds

Pocket Parks

Public Art

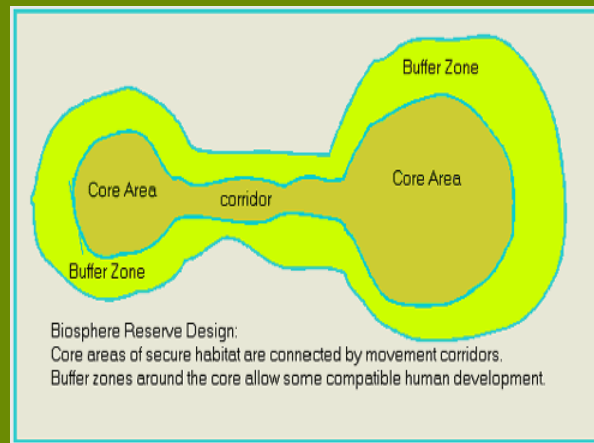
Rooftop Gardens

Streets/Trails

Water Streets

Waterfronts

Woonerfs





Environmental Learning Parks

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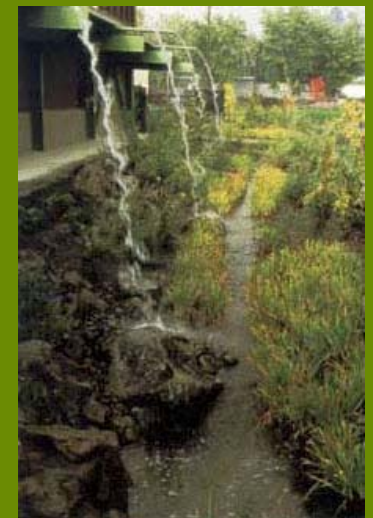
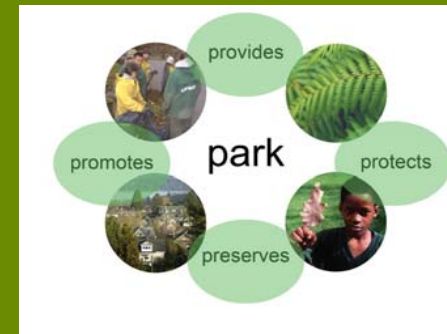
Woonerfs

• Elements

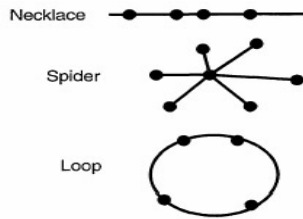
- Natural Environmental Experience
- Recreation Opportunities
- Modeling of Sustainable Development
- Stewardship
- Learning Center
- Educators
- Partnerships

• Contexts

- Close to schools, communities, and natural environments
- Highlight a local natural element



Walnut Creek Urban Wetland
Education Center, Raleigh, NC



Habitat Corridors

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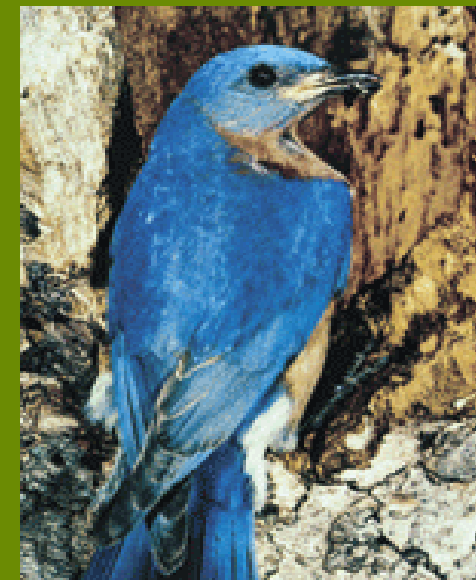
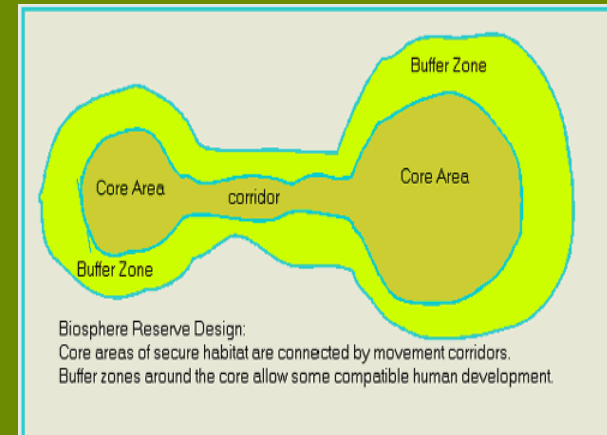
Woonerfs

- **Habitat fragmentation threatens species**

- **Types of Habitat Corridors**

- Riparian Ribbons
- Road verges
- Hedgerows
- Woodlands

- **Designs**
 - Necklace, spider, loop
- **Size, vegetation, topography varies with species targeted**





Pocket Parks

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Woonerfs

- **Qualities:**
 - Small Size
 - Serve local neighborhood
 - Often community or foundation-developed
 - Uses
 - Play
 - Rest, Relaxation
 - Events
- **Scatter throughout the urban environment**



Greenacre Park

Post Office Square



Paley Park



Rooftop Gardens

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- **Ecological Function**

- Temperature moderation
- Insulation
- Stormwater management
- Wildlife habitat



www.hrt.msu.edu/greenroof

- **Urban Open Space**

- Accessible green space
- Urban agriculture



www.greenroofs.com/projects

- **Sustainable Showcases**

- Location and visibility
- Research Opportunities



www.greeninggotham.org



Pedestrian + Bicycle Oriented Spaces

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Benefits

- Enhances livability
- Enhances citizen health
- Promotes social interaction
- Habitat corridors
- Reduces reliance on cars

Recipe

- Linked walkways and bike paths
- Pedestrianized intersections
- Visible signage
- Night lighting
- Simplified median crossing
- Safe access to commercial areas
- Auto/Parking Restricted Zones
- Walking/bicycling transit lanes



Cat Street
Tokyo, Japan



Herald Square
New York City



Cycle lanes
Newbury, Berkshire



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- **Variation On A Green Street**
 - Water flow from surrounding surfaces
 - Water treatment
 - Fits well in space limited areas
- **Design elements**
 - Street runnels
 - Fountains, art
 - Water walls
 - Paving patterns
- **Examples**
 - Vine Street
 - SEA Streets





Waterfronts

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- **Development Pattern**

- Sites of Settlement
- Industry: Shipping and Manufacturing
- Transportation
- Decline
- Revitalization



- **Edge-Zone Energy**

- Habitat Edge
- Human Edge
- Design and Open Space



- **Examples**

- San Francisco
- New York City



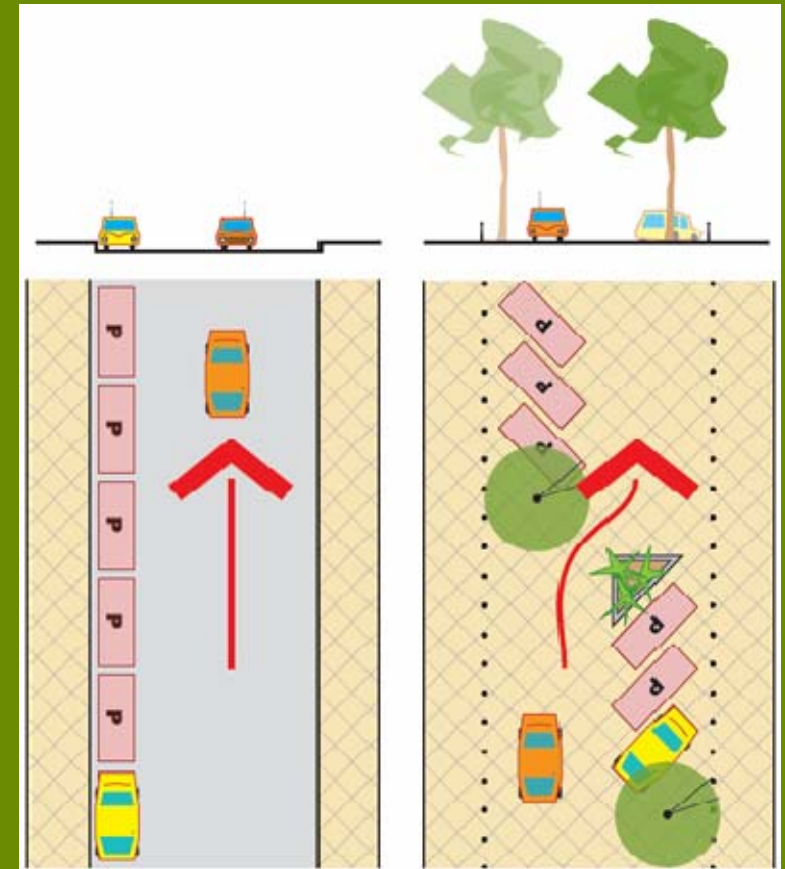


Woonerfs

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- **Fusion of Car & Pedestrian Space**
- **Quality Details**
 - Floor
 - Bollards
- **Obscure Sight Lines**
- **No Grade Separation**
- **Self Regulating; Ambiguity**
- **Less Private Open Space**





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Implementation Mechanisms

Capital Campaigns

Conservation Easements

Fee Waivers

German Environmental Law

Grants:
Municipal/State/Federal

Intermediary Agency

Matching Grants

Military Decommissioning

Mitigation, Brownfields

Non-profits

Real Estate Excise Tax
(REET)

Sales Tax-Earmarked

Tax Increment Financing
(TIR)

Transfer of Development Rights (TDR)

- **Fee Waivers**

- Incentive, such as tax reduction
- If project meets sustainability goals, fees waived

- **Sales Tax – Earmarked**

- Designation of part of sales tax for open space acquisition (ex. .25%)

- **Transfer of Development Rights**

- Voluntary transfer of growth from “sending areas” to “receiving areas”





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