Regional Parks and Greenspaces Planning in Portland, Oregon: The Politics and Science of Providing for Nature in Cities

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> The belief that the city is an entity apart from nature and even antithetical to it has dominated the way in which the city is perceived and continues to affect how it is built. The city must be recognized as part of nature and designed accordingly.[1]
>
> — Anne Spirn, *The Granite Garden*

This essay traces the incremental evolution of greenspace, park, trail, and natural resource planning in the Portland–Vancouver metropolitan region over the past 35 years, including lessons learned along the way. When I first became involved with urban wildlife issues with a small grant from Oregon's Department of Fish and Wildlife, I was told by local land use planners that there was "no place for nature in the city." That attitude was not only prevalent within the planning profession but embraced by many conservation organizations.

Even today there are some in the planning profession and conservation organizations who argue that protection of urban nature is a waste of time, energy, and resources. More recently, however, local and regionally based park and greenspace advocacy groups have embraced a 21st-century corollary to Thoreau's aphorism: "In livable cities is preservation of the wild."

Protection, restoration, and active management of natural resources in the urban landscape is necessary if we are to protect farm, forest, and natural resource lands outside our cities. It is not enough, however, to simply build higher-density, compact cities. If we are to promote compact urban form, urban dwellers will also insist on access to nature where they live, work, and play—in our cities.

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The Urban Growth Boundary: Blessing and curse

> In putting the case for higher density ... putting more people on developed land, more land will be left undeveloped. We should apply an equally rigorous standard to open space. Vigorous open space programs will help to keep the balance.... [I]f we have to err in our acquisition programs let it be toward more open space.[2]
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> — William H. Whyte, T*he Last Landscape*

Oregon, and particularly the Portland metropolitan region, has been celebrated for several decades as a pioneer in sustainable development. Writing in *Green Urbanism: Learning from European Cities*, Timothy Beatley cites Portland, Oregon, as one example of progressive regional, bioregional, and metropolitan-scale greenspace planning in the United States. Portland is also known for its land use planning and sustainable practices.[3]

The state is notable for requiring Urban Growth Boundaries for every city in the state. That legal requirement has been an unqualified success with regard to combating urban sprawl and protecting the working landscape outside urban growth areas. For example, between 1990 and 2000 the Portland region's population grew by 31% but consumed only 4% more land to accommodate that growth. By contrast, the Chicago region grew by 4% yet consumed 36% more land.[4]

However, for decades a perverse side effect has resulted in the loss of natural resource lands inside the Urban Growth Boundary. The argument was made that protecting fish and wildlife habitat and "too much open space" inside the Urban Growth Boundary was antithetical to good urban planning in that so-called "buildable land" would be taken out of production for urban development. As a result, the Portland metropolitan region has failed to adequately protect natural resources within the region's Urban Growth Boundary.[5]

Protecting the wild hinterlands requires a concomitant effort to protect and restore a vibrant urban green infrastructure of healthy watersheds, fish and wildlife habitat, parks, and recreational trails where the vast majority of our population lives—in cities. Fortunately, some conservation organizations have retooled their programs in recognition of the role urban nature protection plays in a broader conservation agenda and have begun to focus on the protection and restoration of nature in cities as well. In fact, numerous local conservation and civic organizations now focus exclusively on urban nature conservation in the Portland metropolitan region and others across the country.

Lesson learned: Build on legacies

> Marked economy may also be effected by laying out parks, while land is cheap, so as to embrace streams that carry at times more water than can be taken care of by drain pipes. Thus, brooks or little rivers which would otherwise be put in large underground conduits at enormous public expense, may be attractive parkways.[6]
>
> — John Charles Olmsted,1903

In the late 1980s, a lack of natural resource protection, park deficiencies, and a disconnected, underfunded trail system sparked a grassroots-led Metropolitan Greenspaces movement

in the Portland–Vancouver metropolitan region. That initiative built on earlier park, natural area, and regionalist visions, including those of John Charles Olmsted, Lewis Mumford, and the Columbia Region Association of Governments (CRAG), the predecessor to the nation's only directly elected regional government, known as Metro.

John Charles Olmsted—the adopted son of famed landscape architect Frederick Law Olmsted, Sr.—was brought to Portland by the citizen-led Park Board. He stated in his 1903 *Report of the Park Board, Portland, Oregon*, "While there are many things which contribute to the beauty of a great city, unquestionably one of the greatest is a comprehensive park [system]." He urged that the integration of natural areas into a comprehensive park system would "afford the quiet contemplation of natural scenery (with) rougher, wilder and less artificially improved [parks]."[7] His 1903 plan continues to inspire park, trail, and greenspace planning to this day.

Olmstedian views were echoed in the 1971 CRAG *Regional Open Space Plan*, which read, "For many persons in the city, the presence of nature is the harmonizing thread in an environment otherwise of man's own making. Comprehensive planning should identify floodplains, wetlands, scenic, wildlife and recreational [areas]. Development should be controlled." The report called for bi-state cooperation between Oregon and Washington, a concern earlier expressed by Lewis Mumford in a 1938 speech to the City Club of Portland. Most significantly, the CRAG report for the first time called for the integration of Olmsted's comprehensive and connected park system with Mumford's regional approach to establish a regional open space program.

Lesson learned: Think regionally

> From one point of view, the urban–rural linkage idea is downright revolutionary, for in the United States of America it has been our policy to try to separate the city from the country.... In contrast, the impulse behind the greenway networks is to integrate land uses rather than separate them—to join the urban and the rural into a kind of normative American countryside. The name of the enterprise we undertake to accomplish all these worthy goals is regional planning....[8]
>
> — Charles E. Little, *Greenways for America*

What sparked the first regionally based effort to create an interconnected park, trail, and natural areas system was the intersection of interests of park and natural area advocates, regional trail advocates, and concerns about deteriorating water quality and flooding. The seeds were sown in 1984 at a regional Columbia–Willamette Futures Forum that urged the regional government—Metro—to undertake a regional park inventory. The Audubon Society of Portland, which had proposed the establishment of a "Regional Metropolitan Wildlife System" with funding from a local foundation; the 40-Mile Loop Land Trust trail advocacy group; and other place-based park and greenspace advocacy groups successfully argued that the region needed to expand the park inventory to include a new natural resource-focused protection, restoration, and management program.

Metro, which has jurisdiction across 24 cities and three counties, was seen as the ideal

planner and implementer of such a program. Their role as a regional convener was essential to launching a truly regional natural area acquisition and protection program.

Lesson learned: Pick a good model

Critical to building political will was finding a good model that we might replicate. Without question the national model at the time was the East Bay Regional Park District, which serves Contra Costa and Alameda counties in the San Francisco Bay Area. In 1988, East Bay had passed a $225 million bond measure, which was perfect timing given that we were in the early stages of formulating our own acquisition bond measure through Metro. East Bay staff held two days of meetings and a full day of field tours for elected officials, park professionals, and park advocates from our region. We returned to Portland with a model we could emulate. As with East Bay's approach we decided our own bond measure would allocate 75% to Metro for acquisition of natural areas, with 25% going to local park providers. The local share brought local park providers to the table, who then assisted in passing the bond measure, having "skin in the game."

Lesson learned: The power of the outside expert

Public and political support was also generated at several *Country in the City* symposia held at Portland State University between 1988 and 1992. Experts in regional and greenspace planning, such as David Goode, who was then director of the London Ecology Unit and who would later become head of the environment for the City of London, and other experts, including Tony Hiss, contributor to *The New Yorker* magazine and author of *The Experience of Place,* and Charles E. Little, author of *Greenways for America,* spoke at the symposia.

Goode had a significant impact on opinion leaders when he addressed the city's leading civic organization, the City Club of Portland. Goode, an internationally recognized expert on urban nature schemes, shared the London Ecology Unit's nature conservation efforts in 12 boroughs of greater London. Goode and his team of urban ecologists had put forth a comprehensive rationale for integrating nature into the city and providing access to nature to achieve emotional, intellectual, social, and physical benefits.[9]

Goode also focused on restoration of a seemingly hopelessly degraded inner-city waste site, one which is now a wetland urban nature park: Camley Street Natural Park. The transformation of a seemingly irredeemably blighted urban site to a small green oasis in London's heart greatly accelerated the Portland region's commitment to addressing environmental and social equity and inner-city park and greenspace needs.

Lesson learned: Icons are powerful

Icons have proven to be powerful catalysts in the conservation arena, particularly in the urban context. Salmon, for example, are the quintessential representative of the natural world throughout the Pacific Northwest in both urban and rural areas. Salmon are especially central to the lifeways of indigenous peoples.

The great blue heron seemed to me to be the perfect icon for Portland, being one of our most charismatic megafauna. They're impossible to miss, standing over three feet tall, with a

wingspan of over six feet. In 1986, I button-holed the former Portland mayor, Bud Clark, an avid canoeist known for his love of herons, to suggest he proclaim the heron as the city's official bird. Two weeks later a city hall proclamation did just that. While it may sound frivolous, the process of establishing an official city bird when combined with an annual celebration and mayoral proclamation provides a yearly opportunity to encourage local elected officials to "re-up" their commitment to protecting the symbol of the city's environmental quality. I then asked the Oregon Poet Laureate, the late William Stafford, if he would write a poem commemorating the event. The result, "Spirit of Place," perfectly reflected our efforts to live with nature in the city:

> Out of their loneliness for each other
> two reeds, or maybe two shadows, lurch
> forward and become suddenly a life
> lifted from dawn or the rain. It is
> the wilderness come back again, a lagoon
> with our city reflected in its eye.
> We live by faith in such presences.
> It is a test for us, that thin
> but real, undulating figure that promises,
> "If you keep faith I will exist
> at the edge, where your vision joins
> the sunlight and the rain: heads in the light,
> feet that go down in the mud where the truth is."
>
> —William Stafford, 1986

Lesson learned: Have fun, it's all about relationships

Shortly thereafter, while sitting at the city's first microbrew pub, the brew master walked by and asked how our urban conservation efforts were going. I recounted the fact that we'd just adopted a city bird and he responded he'd just brewed a new ale which he had not yet named. Blue Heron Ale was launched that afternoon. Again, what may sound trivial turned out to be a significant instance of "oiling the gears" of urban conservation. Bridgeport Brewpub became the gathering place for elected officials, agency staff, and park advocates where relationships were spawned and strengthened. Most importantly, increased trust allowed for closer collaboration, particularly between nonprofit advocates and agencies. Many creative initiatives were launched over a few pitchers of Blue Heron Ale!

Lesson learned: Engage the feds

In 1990, I accompanied several US Fish and Wildlife Service (USFWS) biologists to visit with the regional director in Portland to ask that the service act as fiscal sponsor for our fledgling greenspaces initiative. He agreed. The concept we adopted was that the funds would be spent (with USFWS oversight) for ecologically focused efforts. Subsequently, with support from the late Senator Mark O. Hatfield, then chair of the US Senate Appropriations Commit-

tee, and Congressman Les Aucoin, Congress in 1991 appropriated $1.134 million for greenspace planning in our region. The funds were administered by the USFWS regional office and service field staff were assigned to work with Metro to ensure the nascent Greenspaces program remained true to its ecological focus. Other federal partners included the National Marine Fisheries Service and the US Environmental Protection Agency. Coincidentally, one of our national partners, Chicago Wilderness, was created with a portion of those federal dollars. More recently, Portland-area national wildlife refuges, with Tualatin River National Wildlife Refuge taking the lead, secured a $1 million annual allocation to support efforts to better engage the public in regional greenspace issues.

Lesson learned: Think big

> Make no little plans. They have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Think big.[10]
>
> — Daniel Burnham

All of these efforts led, in 1992, to Metro Council adoption of a bi-state *Metropolitan Greenspaces Master Plan* covering northwestern Oregon and southwestern Washington. The plan laid out the following goals:

1. Create a cooperative regional system of natural areas, open space, trails, and greenways for wildlife and people in the four-county metropolitan area;
2. Protect and manage significant natural areas through a partnership with governments, nonprofit organizations, land trusts, interested businesses and citizens, and Metro;
3. Preserve the diversity of plant and animal life in the urban environment using watersheds as the basis for ecological planning;
4. Establish a system of interconnected trails, greenways, and wildlife corridors; and
5. Restore green and open spaces in neighborhoods where natural areas are all but eliminated.[11]

With a plan in hand and having identified specific sites for acquisition, Metro succeeded in passing a 1995 regional greenspace initiative, patterned after East Bay's successful 1988 bond, that produced $135.6 million for acquisition of some of the region's most significant fish and wildlife habitat and natural areas, and the acceleration of the regional trail network.

By June 2002, Metro had over 8,200 acres of land that had been purchased, donated, or protected with conservation easements, well exceeding the original target of 6,000 acres. Metro natural area ownership went from zero to 8,200 acres in just fourteen years, and after a second $227.4 million measure passed in 2006, now totals more than 17,000 acres. Local park providers, too, added their own natural areas with their 25% share of the regional bond, and the City of Vancouver and Clark County in the state of Washington established acquisition programs based on statewide Conservation Futures and a real estate transfer tax.

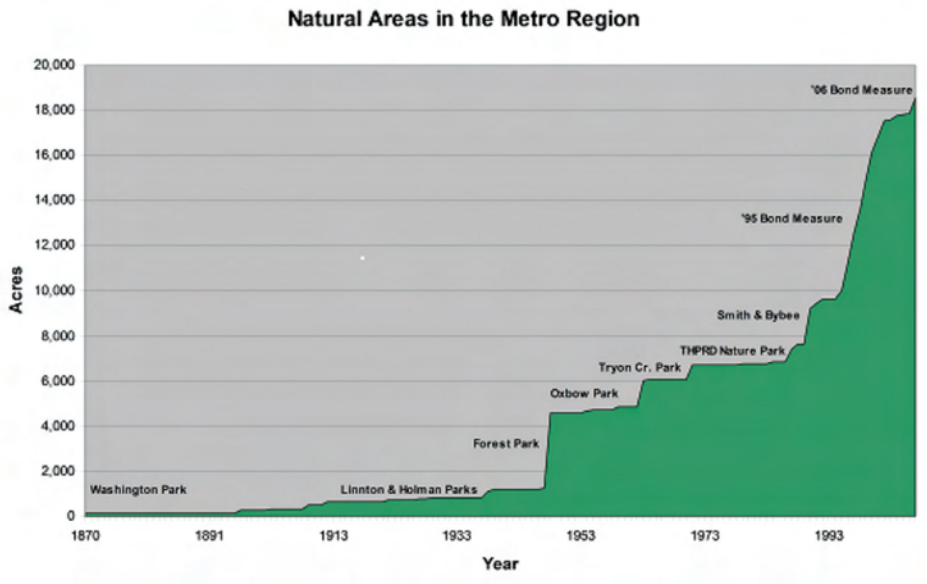

Figure 1. Regional park land additions, 1870 to 2003. Graphic courtesy of Jim Morgan, Metro.

Lesson Learned: Engage the Utilities

> Green infrastructure is a strategically planned and managed network of natural lands, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations. Green infrastructure networks work together as a whole to sustain ecological values and functions.[12]
>
> — Mark A. Benedict and Edward T. McMahon

In the early 1990s, I got a phone call from a public policy expert that reminded me of the famous line out of the movie "The Graduate"—only his admonition was not about plastics. He had three words for me—Clean Water Act—and took us to task for working exclusively with park and wildlife agencies and ignoring local utilities; more specifically, stormwater agencies. Once we realized that they managed virtually all the water that fell onto the urban landscape, we launched an effort to engage city and special district utilities to embrace the utilization of green infrastructure to more holistically address water quality and floodplain management across the region.

Beginning in the early 1990s, the concepts of green infrastructure and ecosystem services slowly began to "filter' into urban planning and local and regional watershed management policies. What had been purely "sewer agencies" dominated by gray infrastructure slowly morphed into watershed health-based utilities.

Grey to green

One example was Portland's Grey-to-Green Program. Initiated in 2008, the city committed $55 million over a five-year period to create green roofs, disconnect downspouts, make bioswales, and establish rain gardens. The program constructed 900 green street projects, planted over 80,000 trees (thereby expanding the urban forest canopy to 33% of the city), and acquiring more than 400 acres of the city's most sensitive fish and wildlife habitats.

These projects have been designed to complement, and in some cases, replace highly engineered, expensive grey infrastructure (pipes, concrete, streets) with cheaper, greener, smarter methods of managing urban stormwater. Prior to this initiative, stormwater had been seen as a nuisance to be gotten rid of as quickly as possible by putting into a maze of underground conduits. Today, stormwater is recognized in Portland's Watershed Management Plan as a precious natural resource to be managed on site if possible, and reintegrated into the city's expanding green fabric.

Chillers or trees?

To the west of Portland, the Tualatin Basin's Clean Water Services (formerly Unified Sewerage Agency) was faced with the possibility of spending as much as $80 million to build artificial chillers to cool effluent from their water treatment plants, and as much as another $50 million annually to run the chillers. Instead, they persuaded regulatory agencies to allow them to plant trees and shrubs along the Tualatin River and its tributaries.

That effort will cost $6 million, involve over 36 landowners, and eventually cover 35 stream miles. At project's end, they will have planted more than 453,000 native plants. Relying on refrigerators to chill the effluent is as high-tech a solution as one can imagine, and one that yields exactly one benefit: cooler water. Clean Water Services' green infrastructure approach yields many benefits, including creating local native green industries, absorbing over 100,000 metric tons of carbon, and improving fish and wildlife habitat—with a net ecosystem services benefit of $74 million in capital costs and $50,000 in annual operational costs.

Putting it all together: Collective impact

In 2007, David Bragdon, then president of the Metro Council, convened leaders from around the region and the country, including Chicago Mayor Richard Daley, for a "Connecting Green" symposium. Bragdon announced that his last two years at Metro would be dedicated to "the world's best park and natural area system" and challenged Daley and others to a contest of whose city would be the greenest. Subsequently, Bragdon went to New York City to run Mayor Michael Bloomberg's sustainability program. One of our highest priorities was to avoid continuing what had been a string of "one offs" that, while successful, were energy intensive and did not guarantee success into the future. We knew we needed to create a long-lasting alliance of partners that would (1) increase investment in our system of parks, trails, and natural areas; (2) institutionalize the effort into the future; and (3) better engage the general public.

Working with Bragdon and his staff, and with Metro acting as our "incubator," the Audubon Society of Portland, Urban Greenspaces Institute, and Trust for Public Land hosted

Figure 2. David Bragdon at the "Connecting Green" symposium (Mike Houck).

numerous focus groups and meetings to build consensus for a new organization to continue the work of creating a world-class system of parks, trails, and natural areas—and healthy watersheds: what was dubbed The Intertwine. The obvious next step was to launch a 501-c-3 nonprofit organization: The Intertwine Alliance. In July 2011 the alliance was formed, with 28 partners. There are now more than 150.

THE INTER TWINE

Figure 3. The Intertwine Alliance logo.

We structured the alliance on a "collective impact" model,[13] which we were convinced would take us beyond previous loose-knit coalitions that, while successful over the short term, were relatively ephemeral. The hallmarks of a collective impact approach are setting a common agenda; engaging in "mutually reinforcing" actions; setting up a common methodology for measuring success; intentional, continuous communication; and creating a stable "backbone" organization—The Intertwine Alliance.

Biodiversity planning: Finally getting it right in the Portland–Vancouver metro region

The alliance focuses on the nexus between human health and access to nature, creating an active transportation and regional trail network, equity and inclusion, urban forestry, green infrastructure, conservation education and public engagement, and conservation. The cre-

ation of a *Regional Conservation Strategy* and *Biodiversity Guide*,[14] and mapping of natural resources across the 3,000-square-mile geography of The Intertwine, was the first collective impact project the alliance took on.

That effort illustrates how effective a collective impact approach can be. The alliance launched the *Regional Conservation Strategy* project, which was coordinated by a nonprofit partner, the Columbia Land Trust. More than100 individuals and organizations collaborated on the *Regional Conservation Strategy* and *Biodiversity Guide,* creating a high-resolution habitat map, and a fish and wildlife habitat modeling tool.

To achieve both coarse- and fine-grained resolution, the alliance contracted with Portland State University's Institute for Natural Resources (INR) to produce a land cover maps of the greater Portland–Vancouver region at a resolution of 5 meters per pixel. The project mapped land cover, forest and tree patches, watersheds, and public land ownership. To develop a method for prioritizing acquisition and restoration across both the urban and rural landscape, the alliance developed a modeling effort that was coordinated by a GIS-savvy subcommittee representing federal, state, and local jurisdictions and nonprofit organizations. The INR assumed responsibility for data development and the modeling approach with input from the GIS Subcommittee.

The model allows us, for the first time in our region, to prioritize areas of high conservation value across the 3,000-square-mile urban–rural continuum, both within and outside the urban core, from the regional scale to individual neighborhoods and streetscapes.

Had this project been taken on by a single entity or by a government agency, which is less nimble and operates under different constraints than a nonprofit coalition, it would have taken far longer and cost significantly more than the nonprofit-led collective impact collaborative effort we adopted. Armed with the high-resolution mapping and modeling results, The

Figure 4. (Left) Cover of *Regional Conservation Strategy;* (right) cover of *Biodiversity Guide*.

Intertwine Alliance and its partners from nonprofit organizations and government agencies have, for the first time, the science-based tools with which we might manage both the urban and rural landscapes with an aim to protecting regional biodiversity, providing a framework for adapting to climate change, and realizing the long-held vision of creating a world-class system of parks, trails, and natural areas for the region's citizens to enjoy access to nature where they live, work, and play.

Further reading

- David Goode, *Wild in London* (London: Michael Joseph, 1986). A beautifully illustrated inventory of the diverse wildlife that occurs in Greater London's derelict sites and native habitats. Provided the inspiration for Portland's *Wild in the City* (see next) and undoubtedly many other books of its kind throughout the world.
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York: Basic Books, 1984). The first book to discuss the city as a unique ecosystem. Includes practical recommendations for stormwater management, energy reduction, and other progressive strategies that are as relevant today as when the book was published more than two decades ago.

- William H. Whyte, *The Last Landscape* (Philadelphia: University of Pennsylvania Press, 2002). The most influential book written about open space and landscape planning in America. Whyte's recipes for densifying our cities, along with regional planning and protection of open space and natural areas in the heart of the city, has inspired urban park and natural resource planning throughout the United States.

Endnotes

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