

# MENOMONEE RIVER VALLEY

*Natural Landscapes for Living Communities*

## Statement of Qualifications

*My eyes have known  
as slender reeds,  
as rafts,  
this estuary shift of life—  
slow and silting,  
eroding, twisting,  
gliding onward always—  
these most immeasurable layering images,  
my own:  
sluice of my eyes.*

—Grant Jones



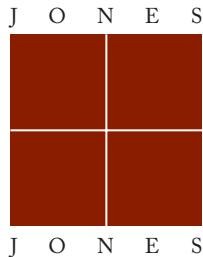


26 February 2002

Mr. Peter McAvoy, Director  
Department of Environmental Health  
Sixteenth Street Community Health Center  
1337 S Cesar Chavez Drive  
Milwaukee WI 53204-2712

Dear Peter:

We are pleased to submit our qualifications for the Menomonee River Valley National Design Competition: *Natural Landscapes for Living Communities*. We are captivated and challenged by the goals of the community stakeholders to reclaim and revitalize the "heart of Milwaukee's urban and natural landscape." We are confident that we can create an open space design for the competition site that will serve the immediate neighborhoods and provide a model of green urbanism for the rest of the river valley and the region.



Jones & Jones's 30-year legacy as pioneers in urban landscape architecture, ecological restoration, and river corridor planning is unique in its creativity, breadth, and degree of public collaboration. We engage the land and its communities, human and wild, to develop healthy urban environments that stimulate learning and environmental stewardship. We measure our success by how well we respect the needs, goals and vision of our clients and how well we reflect the spirit of the regions in which we work.

We have teamed up with Applied Ecological Services, Inc. (AES), a Wisconsin-based ecological consulting and restoration firm that is intimately familiar with the competition site and the larger Menomonee River ecosystem. More importantly, AES is a demonstrated leader in the understanding and restoration of degraded natural systems.

Jones & Jones and AES are ready to assist in your design and planning efforts. We look forward to the opportunity to participate in this important design competition. Please do not hesitate to call if you have any questions related to our qualifications, or if you require additional information about our firms. We look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ilze Jones', written in a cursive, flowing style.

Ilze Jones, AIA, FASLA  
Senior Principal

A handwritten signature in black ink, appearing to read 'Grant Jones', written in a bold, cursive style.

Grant Jones, FASLA  
Senior Principal





## APPROACH FUNDAMENTALS

*"Here is a simplified synopsis of the Jones & Jones strategy for success. Begin the study for each commission within the largest and earliest context. It is not uncommon for them to think plate tectonics, volcanism, earth history, especially post-Pleistocene flora/fauna progression, cultural successions. In this way, by tapping into the energy of the anima mundi, the mysteries of the primordial rhythms of nature, **the spirit of life-force** is exalted in their work."*

— Richard Haag

*The approach of Jones & Jones with Applied Ecological Services is a dynamic and interactive process of **form getting and form making**. A **suggestive landscape** speaks to us from beneath the surface of our everyday perceptions, but to hear it we must **reach back** through time to engage the fundamental processes that underlie our present and our future. We must embed our understanding in a **bioregional context** to gain awareness of the details that have always mattered, but have all too often been overlooked.*

## MEASURES OF HEALTH

<i>biodiversity</i>	If we pursue the right questions, the landscape reveals measures of health that help us shape the urban environment. These measures defy simplistic problem-solving. They demand that we reconnect ourselves to the essential energies of the land and recognize our interdependence. These energies can be harnessed to create places of vitality, integrity, and beauty.
<i>water quality</i>	
<i>reduced flooding</i>	
<i>connectivity</i>	
<i>habitat diversity</i>	
<i>environmental justice</i>	
<i>living wage jobs</i>	
<i>learning</i>	
<i>imagination</i>	
<i>resilience</i>	
<i>self-healing</i>	
<i>flexibility</i>	

## LIFE-GIVING SYSTEMS

<i>water drainage</i>	The Menomonee River Valley is a confluence or crossroads of the systems that animate Milwaukee. Healing this land involves a repair in the composition and integration of its life-giving systems, and these systems must be made more apparent in our everyday lives. If we can connect a river to its floodplain, we can connect people to their river.
<i>community</i>	
<i>agriculture</i>	
<i>industry</i>	
<i>circulation</i>	
<i>energy</i>	
<i>commerce</i>	
<i>natural infrastructure</i>	
<i>art</i>	
<i>education</i>	
<i>health care</i>	
<i>recreation</i>	
<i>the river</i>	



## STRATEGIC INTERVENTIONS

*trails* Strategic interventions that incorporate and influence the repair of our life-giving systems must be developed. Interventions in the Menomonee River Valley will resonate up the river to its headwaters and down the river to Lake Michigan. Interventions that integrate and stimulate surrounding neighborhoods will provide a model of green urbanism for the entire city.

*parks*

*habitat restorations*

*flood management*

*education centers*

*culture centers*

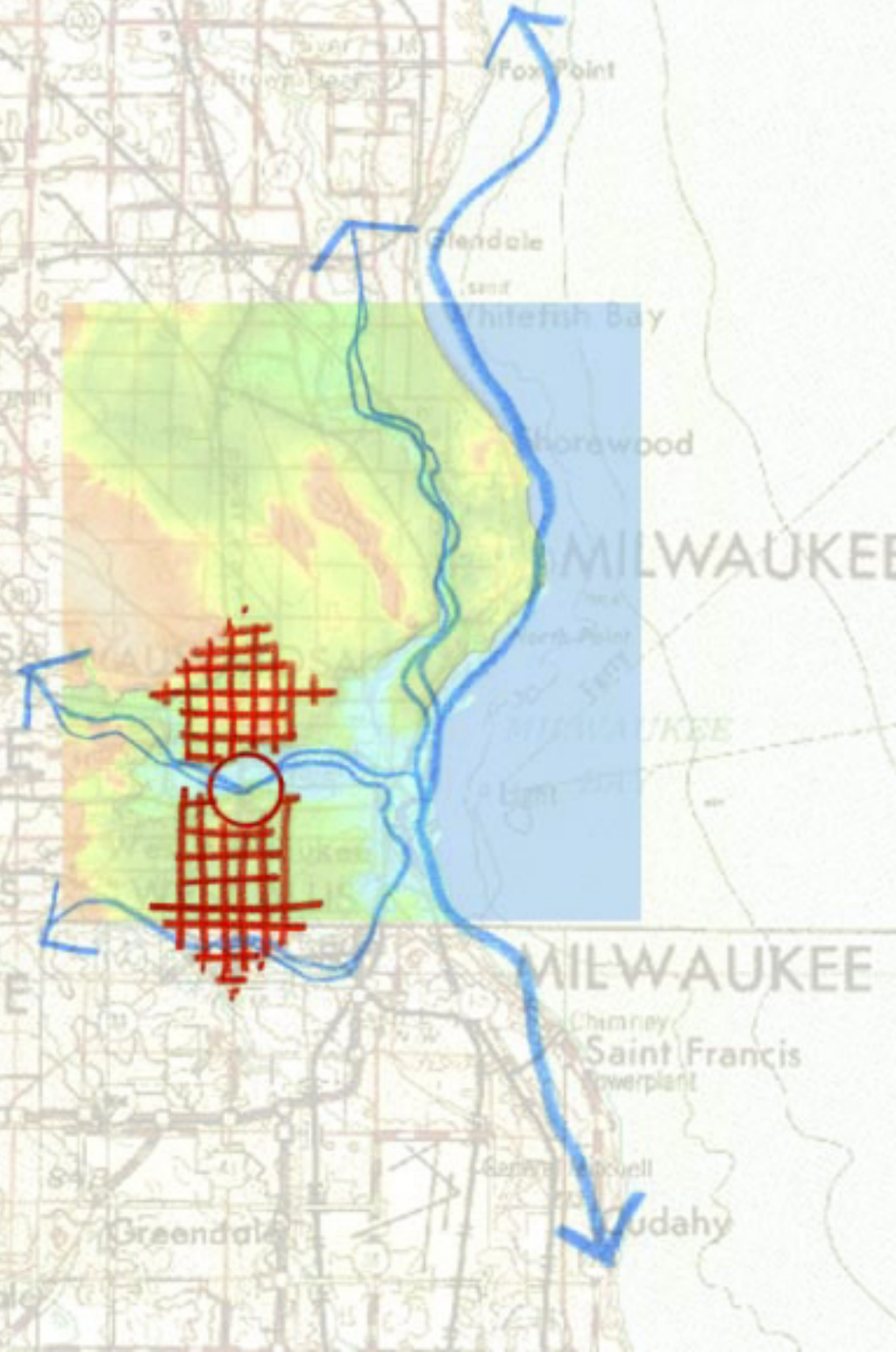
*land art*

*brownfield restorations*

*fisheries restoration*

*wildlife restoration*

*regulations and policy*









# A 1

## LEAD: JONES & JONES ARCHITECTS AND LANDSCAPE ARCHITECTS

*"...what sets the work of Jones & Jones apart is the clarity of the vision of planet Earth as alive, the depth of the analysis applied to the discovery of each landscape's signature, and the continual search to find answers where none have before been found. **These are trailblazers of the highest order**, pioneers who continue to elevate—in fact, who continue to redefine in significant ways—the practices of landscape architecture and architecture."*

— Anne Elizabeth Powell



#### Selected Awards

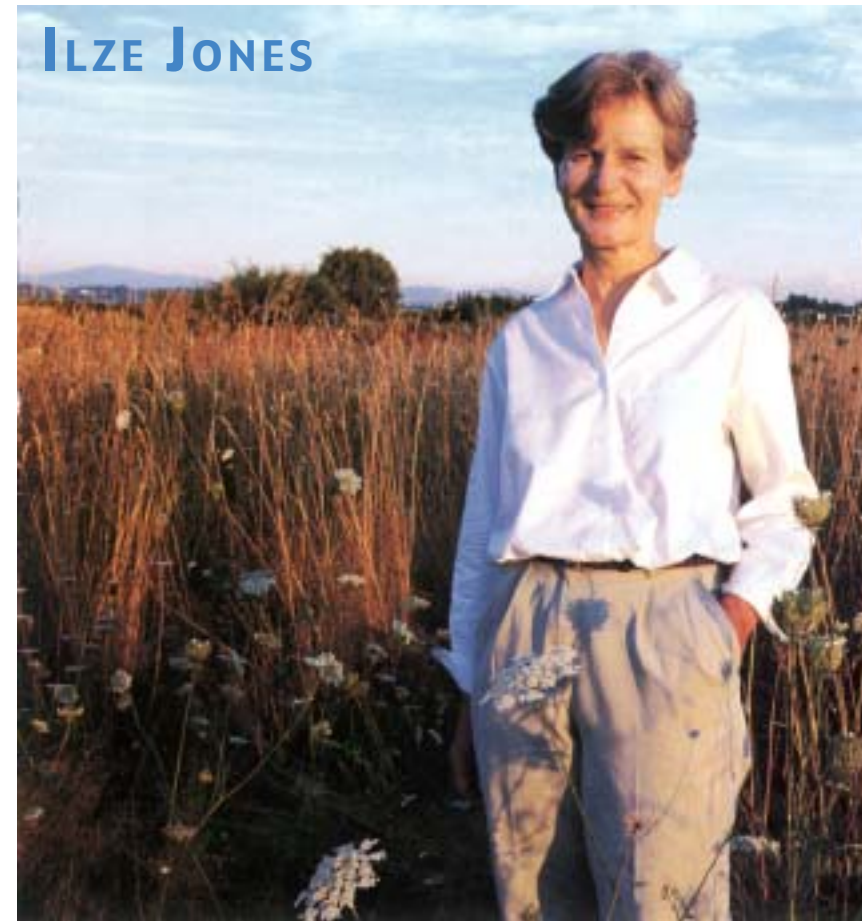
- 1997 Central Waterfront Project (Bell Street Pier), Seattle, Washington  
The Waterfront Center (with Hewitt-Isley)  
Honor Award
- 1993 Duwamish River Revival Gateway Parks, Seattle, Washington  
The Waterfront Center  
Clearwater Award: Grassroots Efforts Toward Waterfront Enhancement
- 1992 Tepotzotlán Ecological Rescue Plan  
International Downtown Association (IDA)  
Merit Award, Planning
- 1992 Master Plan for the State Capitol of Washington, Olympia, Washington  
American Planning Association (APA)  
Merit Award
- 1987 Gene L. Coulon Memorial Beach Park, Renton, Washington  
The Waterfront Center  
"Excellence on the Waterfront" Honor Award
- 1979 Pioneer Square Historic District Open Space Plan, Seattle, Washington  
American Society of Landscape Architects (ASLA)  
National Merit Award in Historic Preservation and Restoration
- 1974 The Nooksack River Plan, Whatcom County, Washington  
American Society of Landscape Architects (ASLA)  
National Honor Award in Regional Development

Ilze Jones embodies in her talent and expertise an interdisciplinary creativity in which her architecture and landscape environments are one, inseparable but each with its own clarity and spirit. Designing and leading a collaboration of environmental disciplines at Jones & Jones, she has produced a body of work and ideas that show the way to achieve honorable environmental stewardship.

Ilze Jones has devoted her career to both city and nature, to the quality of life of our urban communities, and to the conservation of nature beyond the city. In her love for the city's built legacy of buildings and public domain, Ilze has applied her artistry as a designer as well as her analytic skills and leadership to develop innovative strategies for streets, squares, open space, and infrastructure, and the architecture of parks and cultural-educational centers.

#### Relevant Projects

- East Rail Corridor, Madison, Wisconsin
- Sand Point Peninsula, Seattle, Washington  
Master Plan; NOAA Headquarters; Magnuson Park
- Duwamish Gateway Parks, Seattle, Washington
- Duwamish Riverfront Revival, Seattle, Washington
- University of Washington's Union Bay Teaching and Research Arboretum and Center for Urban Horticulture, Seattle, Washington



*Ilze and Grant at Union Bay Arboretum, a wet prairie atop a former landfill*

# GRANT JONES



Grant Jones is a co-founder of Jones & Jones Architects and Landscape Architects, Ltd. in Seattle. He received his B.Arch. from the University of Washington, his MLA from the Harvard Design School, and won the Frederick Sheldon Traveling Fellowship to research environmental determinism in South America and Western Europe. He has practiced ecological design for thirty years, pioneering in river planning, landscape aesthetics, scenic highway design, and zoo design. He has held academic positions at UC Berkeley, Harvard, the University of Virginia, the University of Oregon, and the University of Washington, and leads many of the firm's most innovative current projects in landscape conservation and community-based design.

## Relevant Projects

- Commons Park on the South Platte River, downtown Denver, Colorado (with Civitas, Inc.)
- University of Washington's Union Bay Teaching and Research Arboretum and Center for Urban Horticulture, Seattle, Washington
- Waterworks Park (with Lorna Jordan, Artist), Renton (Industrial Seattle), Washington
- Mountains-to-Sound Greenway, for Communities from Puget Sound, over the Cascade Mountains, to the Columbia Plateau Prairie-Steppe, Washington
- US Highway 93, America's Wildlife Highway, through the Towns and valleys of the Flathead Reservation in Western Montana
- Cedar Lake Park & Bicycle-Commuter Trail, Minneapolis, Minnesota

## Selected Awards

- 2002 Commons Park, Denver Colorado  
The Physical Fitness of Cities: Vision and Ethics in City Building,  
International Exhibition during the 2002 Winter Olympics  
Salt Lake City Planning Division
- 2001 Commons Park, Denver, Colorado  
Merit Award—Design  
American Society of Landscape Architects, Colorado Chapter
- 2001 Highway 93 Memorandum of Agreement, Montana  
President's Transportation Award for the Environment  
American Association of State Highway and Transportation Officials
- 2001 US Highway 93 Design Discussions, Montana  
Merit Award—Analysis & Planning  
American Society of Landscape Architects
- 1997 Waterworks Gardens, Renton, Washington  
The Seattle Section American Society of Civil Engineers  
Outstanding Local Civil Engineering Project
- 1996 Spokane River Centennial Trail, Spokane, Washington  
Top Honor Award  
The Waterfront Center
- 1995 Cedar Lake Park and Trail, Minneapolis, Minnesota  
"Environmental Excellence" for ISTEPA Projects  
Federal Highway Administration
- 1989 Nisqually Basin Interpretive Resource Study  
ASLA, Merit Award



Supporting Ilze and Grant at Jones & Jones will be:

## NATE CORMIER

Nate Cormier, a Wisconsin native, practices ecological restoration through community-based design. His projects frequently blend art and ecology to help people build common ground on degraded or neglected sites. Nate received his MLA from the Harvard Design School and was the winner of the Norman T. Newton Prize for excellence and innovation in landscape representation.



Currently, Nate is the lead designer of [Hat n' Boots Park](#), a project that will restore and reuse roadside structures to activate a civic hub in Georgetown, a Seattle neighborhood in the Duwamish River floodplain that has been isolated and fragmented by industry and transportation infrastructure. Recent projects include the [Duwamish Riverfront Revival](#),

a riverfront restoration in South Park, and Seattle's [Cesar Chavez Park](#), a land art tribute to the revered Mexican-American labor and human rights leader. In the fall of 2001, with Wisconsin's Urban Open Space Foundation, Nate and Ilze worked on the [East Rail Corridor](#) in Madison, Wisconsin.

Nate's provocative manifesto, "Putting the Emerald Back in the Emerald City," was recently published in the Earth Pledge Foundation's *Sustainable Architecture White Papers*. Nate has also written a chapter for *Brown Fields and Gray Waters: Reclaiming, Remediating, and Restoring Post-Industrial and Degraded Landscapes*, to be published in the summer of 2002.

## KAREN JANOSKY, ASLA

Karen Janosky is adept at responding to the needs of multiple stakeholders and constituencies, and was instrumental in developing the city-adopted Rio Nuevo Master Plan and guidelines to revitalize downtown Tucson, creating new plazas and parks, ecological corridors, and restoring the adjacent Santa Cruz River. Prior to joining Jones & Jones from the Olin Partnership, Karen devoted four years to the design and construction of Robert F. Wagner Jr. Park, Battery Park City's southern anchor park on the New York City waterfront and winner of a National Urban Design Award from the American Institute of Architects. Karen received her MLA degree from the Harvard Design School, directly following her architecture studies at Wellesley College.





## RELEVANT PROJECTS

*"The work of Jones & Jones cannot be categorized stylistically. Their work is rooted in a profound respect for and a celebration of place. Their designs interpret place as bio-physical processes, and as intertwined acts of cultural will and transformation. This is the strength of their designs as Art. Each design is unpredictable. It reveals the processes of the past, and in doing so involves the participant-user in a continuum simultaneously reaching backward and forward."*

— David C. Streatfield



# COMMONS PARK

The City and County of Denver  
with Civitas, Inc.  
Denver, Colorado

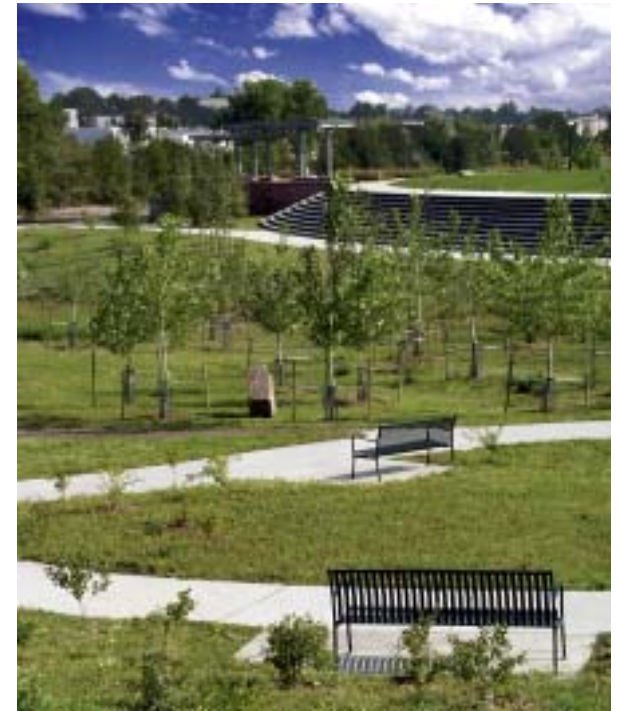
*"Denver's Commons Park proves it is possible for a park to be beautiful and ecosystem-friendly."*

—Amy Souers, Open Space Quarterly

Commons Park is located on the South Platte River in downtown Denver. The focus of this project was to bring downtown and the surrounding neighborhoods together at the river. Civitas and Jones & Jones created a place where people and wildlife can coexist in the heart of the city. The riverbank site was originally a gathering place where the Arapaho traded with tribes from Canada to Mexico.



The park design provides room for informal field sports, picnics, nature study, and general recreation. Landscape forms resemble a huge beaver and express the original riparian corridor through the sand hills of the eastern plains. Commons Park is now the centerpiece of Denver's Riverfront Park System. It is the connecting link in a 10.5-mile greenway along the river, the result of the River Revitalization Plan created by the Platte River Commission.



The 30-acre river terrace has long been recognized as the birthplace of Denver and had been designated as a city park over a century ago. However, as the city grew, the park evolved into a railroad yard and warehouse district when industrialization spread in the South Platte Valley. A new boulevard defines the sweeping south perimeter of the park integrating new development and park.



# EAST RAIL CORRIDOR

Urban Open Space Foundation

Madison, Wisconsin

In November 2001, Ilze Jones and Nate Cormier led a series of community visioning workshops with the Urban Open Space Foundation of Wisconsin to help citizens envision a uniquely Eastside park on an underutilized railyard and shape the future of Madison's East Isthmus. Workshops focused on shared design principles, park themes and elements, and putting it all together.

Information gathered in the field and from workshop participants was synthesized into an opportunities diagram for the East Isthmus; the diagram included a pair of conceptual park "rooms" that illustrate the process for fitting the pieces together, especially focusing on the synergy between the park and its built surroundings.



The first room shows how the development of higher density, multi-use buildings near the park creates opportunities for terraced activities, such as cafes, restaurants, and commerce, with views over the coal cars into the park and activity that might spill into the park. Performances and happenings in the Amphitheater and those in the Skateboard Bowl encourage civic engagement and bridge differences between visitors of varying ages and lifestyles. A diversity of visitors to the park coupled with a wide range of inviting ways to experience the park, provides more "eyes on the park" to ensure safety.

The second room shows how rain collected in the residential areas next to the park can be directed to a network of green infrastructure that becomes an amenity in the park and an important wildlife habitat. The wetlands might even be used to create a physical barrier between the park and the rail corridor that doesn't block views. In addition, integrating community gardens around the marketplace builds relationships between urban and rural farmers, artists, craftspeople, and residents. Gardeners and small-scale commerce contribute a steady source of visitors.

The full report may be downloaded at [www.uosf.org/eastrail\\_report.html](http://www.uosf.org/eastrail_report.html).

# UNION BAY ARBORETUM

University of Washington  
Seattle, Washington

Our plan for the Union Bay Teaching and Research Arboretum charted new directions for this abandoned landfill site on the shores of Lake Washington in metropolitan Seattle. High levels of methane gas generation, leachate contaminations, and a high migrating water table were some of the problems addressed in the long-range Master Plan for this 115-acre site.

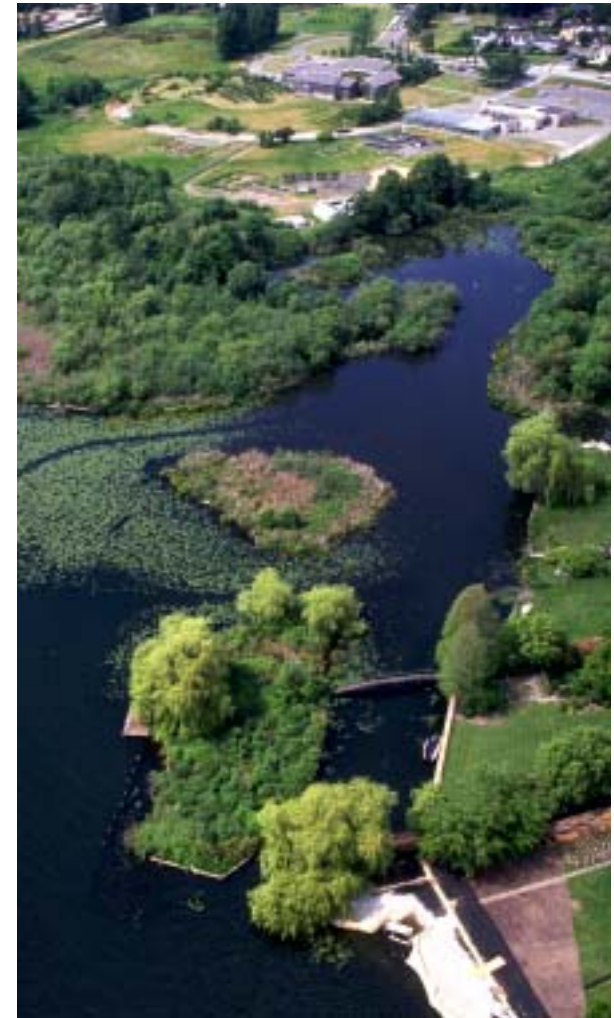
The settling land created a shallow bay in the center of the arboretum, which is now reclaimed and preserved as an open space for scientific observation, wildlife preservation, and passive recreation. On the periphery of the site we designed and built the Center for Urban Horticulture, the first institution of its kind dedicated to the study of plants in urban environments.



*"The land spread before us like a toxic urban wasteland; bubbling gas vents served as constant reminders of the historic reservoir of refuse which lay buried beneath the surface. When the project came to us it was a garbage dump, and they wanted to know whether it would be viable to make an arboretum on this garbage dump—on this landfill.*

*The answer was yes, but by studying the landfill we decided that the landfill was itself so interesting as a living thing that we proposed a sort of laboratory on it—and that led to the university's decision to create a whole new curriculum around it...it was a whole community education for the whole city."*

—Grant Jones



# CENTER FOR URBAN HORTICULTURE

University of Washington

Seattle, Washington

The building forms, composed as a collection of roofs and walls, appear to have evolved over time. This creates a village of buildings. A bank of wooden doors on the classroom side of the courtyard and the angle of the roof, supported by a wooden colonnade over the walkway, remind the visitor that we live in a mild climate, capable of accommodating a successful blend of outdoor and indoor space. The public has responded. People get married here.

The library features a reading area lit from a porch-like bank of windows on two sides and a deep skylight. From the outside, the building is subservient to the landscape. Its many wall surfaces along with the multiple roof lines deflect focus from the building itself to take in the wider view.



The outside walls are washed with diffused Northwest sky colors of grayed plum, brown, and blue. A trellis covers all of the north and most of the south wall of the building, awaiting the rise of climbing plants.



The entire center makes use of simple, inexpensive construction and finishes, including cement stucco exterior finishes that include gypsum wall board on wood frames, plywood panels, and exposed and painted structure.

*"It is a fitting expression not only of a center for urban horticulture, but for Jones & Jones, which specializes in blending the disciplines of landscape design and architecture."*

—Clair Enlow  
Seattle Daily Journal of Commerce



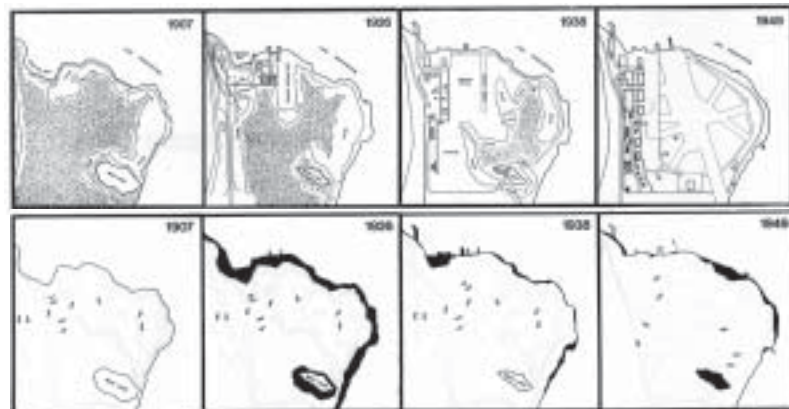
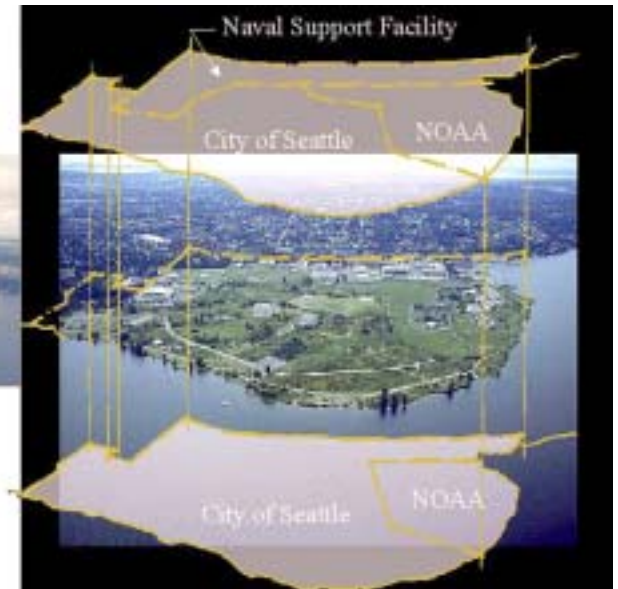
# SAND POINT PENINSULA

City of Seattle  
Seattle, Washington

In the early 1900s, the Sand Point peninsula was a forested sylvan lakeshore retreat with its own marshland—a favored outing for urban Seattleites. By mid-century, clearing, leveling, and filling operations had turned the peninsula into a major naval air station.



**1975 Master Plan** Surplussing of the Sandpoint Naval Air Station started in 1975 as did the first of Jones & Jones's **master plans** for this 450-acre peninsula on Lake Washington. Obsolete as a Naval Airfield, this property presented the challenge of restoring and reshaping the land for habitat enhancement and public use.

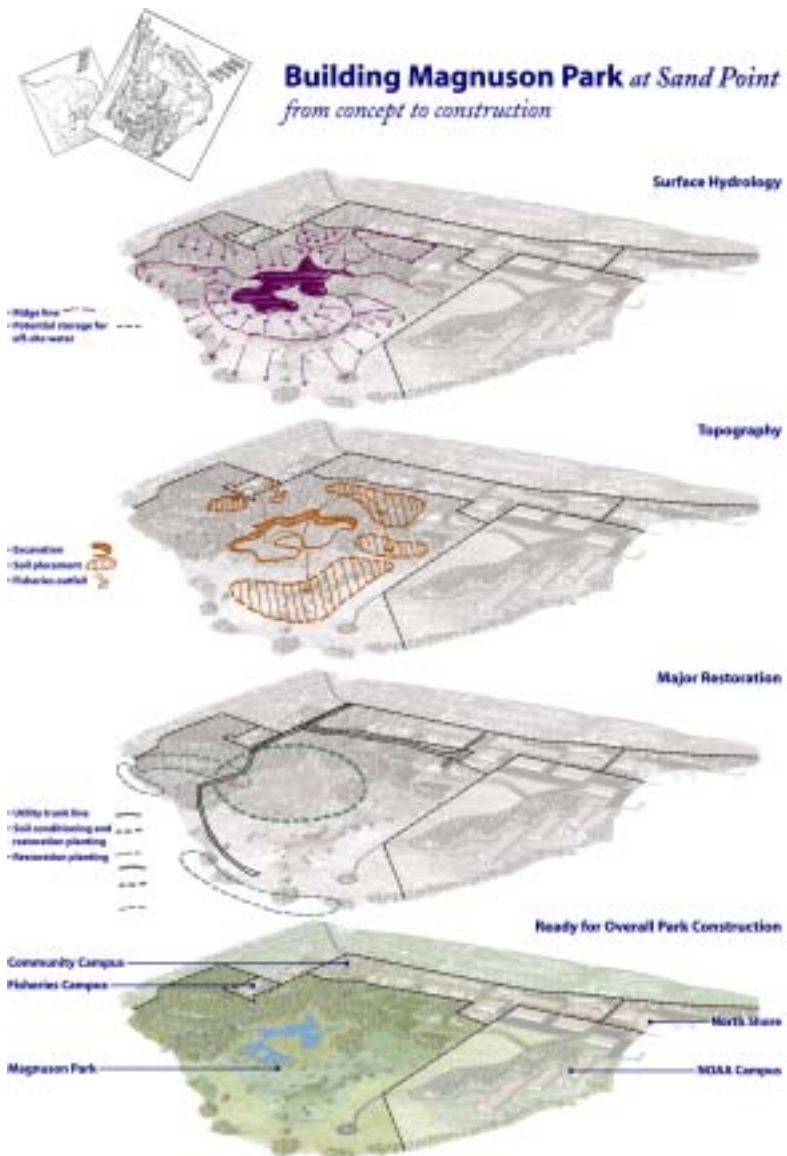


**1975–1999 Development** From this early effort came **Magnuson Park** for the City of Seattle and the **National Oceanic and Atmospheric Administration (NOAA) Western Regional Headquarters** (with NBBJ Architects). This work is significant for the scale and scope of collaboration between site designers and artists: nationally renowned sculptors Siah Ammajani, Doug Hollis, Martin Puryear, Scott Burton, and George Trakas integrated environmental art works that celebrate the wind and water of this expansive lakeshore site.



The remaining 100-acre campus was turned over to the City of Seattle in 1999. The updated **Master Plan** for the consolidated peninsula, including the restoration of previously filled wetlands, was adopted by the City Council in 2000.

1999  
Master Plan



# MOUNTAINS TO SOUND GREENWAY

**Mountains to Sound Greenway Trust**

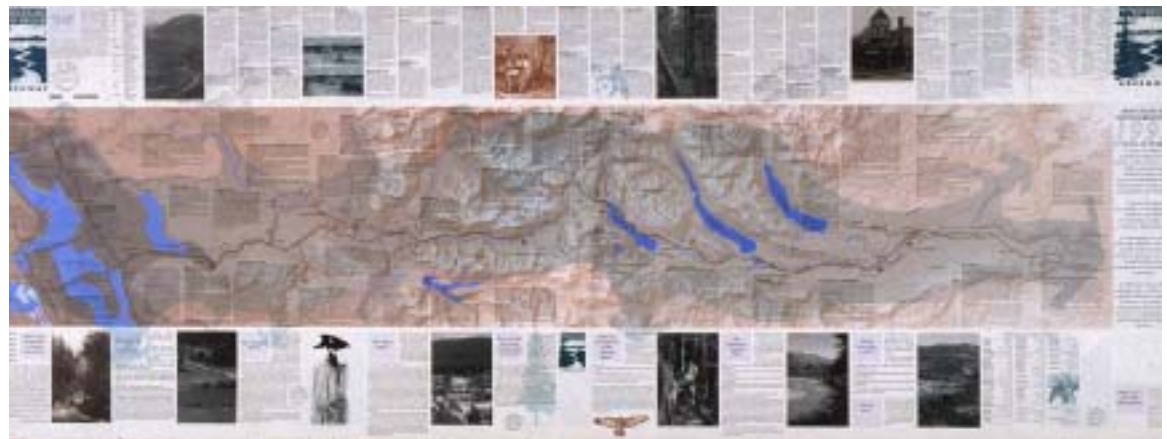
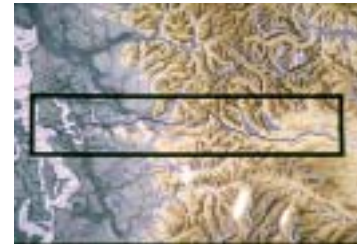
*Elk Heights to Puget Sound, Washington*

The environmental legacy of the Pacific Northwest remains largely intact, withstanding the dramatic growth of the area since the first Euro-American settlers landed on Alki Point 150 years ago. The Greenway is intended to help the Puget Sound basin avoid the growth mistakes of other regions and protect this distinct, environmentally unique legacy for future generations.

The Greenway extends over 100 miles from Eastern Washington to Seattle, paralleling I-90. It connects state parks, national forest areas, wilderness areas, the Cedar River Watershed, privately owned timber land, and several municipalities. By creating multipurpose, scenic, working, and recreational landscape areas and trails, the natural resources of the Greenway can be protected and the effects of human impact mitigated. This project is the result of the collective efforts of a consortium of governmental agencies, private corporations, conservation organizations, and citizen groups whose goal it is to realize that "...the whole should be greater than the sum of its parts."

*"It stretches all the way from the Cascades to Puget Sound. So I think it's a really unique project—really a series of projects: rivers, trails, parks, interpretive centers, forestry management—that will shape the surrounding communities for a long time to come. It is an example of what I call nature's infrastructure. It is of bioregional scale, as is the Seattle metropolitan region, and it is of a scale to be of equal standing to the region's man-made infrastructure."*

—Ilze Jones





# TIME PLACES

**Mountains to Sound Greenway Trust**  
**Washington Forest Protection Association**  
*Elk Heights to Puget Sound, Washington*

This major interpretive signage project was undertaken to inform visitors about trails and attractions along the greenway and about Mountains to Sound Greenway initiatives, including resource conservation, working landscapes, and rural economies. The handcrafted wood and enamel signs provide a rich sense of the region's natural and cultural history. They depict key sites as they have changed through time with a collage of photographs, illustrations, and text. They feature geological origins of the land, the procession of human inhabitants, cultural and economic development, and present-day wildlife.



Sites were selected for their topical interest within the Greenway, and include Preston Community Center, Fall City Waterfront, Fort Tilton, Thorp Flour Mill, Snoqualmie Centennial Log Pavilion, Norman Bridge, Tanner, and Edgewick.

*"The sixteen hand-crafted interpretive markers explain scenic and historic sites along the corridor and Mountains to Sound Greenway stewardship ideas for the future."*

—Nancy Rottle



# MERCER SLOUGH NATURE PARK

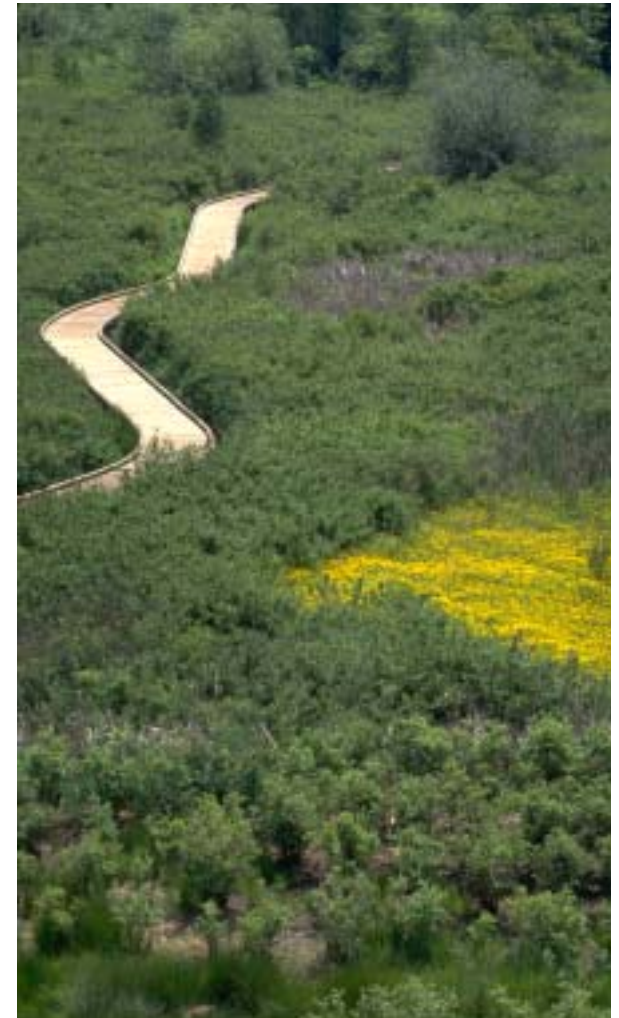
City of Bellevue Department of Parks and Recreation

Bellevue, Washington

*Within view of high-rise office towers, the Mercer Slough Nature Park is home to Great Blue Heron, osprey, Canada Geese and over 100 other bird species, as well as several dozen mammal species including beaver, mink and Red Fox.*

The first of nearly a dozen Jones & Jones projects along the Mountains to Sound Greenway was the Mercer Slough Nature Park. Mercer Slough is a critical element of the City's open space system and a major educational facility for the region. The planning process identified opportunities for educational, interpretive, and recreation uses and defined constraints to development. It proposed and evaluated a series of passive recreation, wildlife, and educational use alternatives; technical memoranda were prepared to assist the city in developing a Programmatic Environmental Impact Statement.

Finally, the production of a brochure describing the plan assisted in the passage of an open space bond issue for the City. To date, the new Blueberry Farm facilities, the Winters House renovation, and wetland trail construction are complete, and design has commenced for other trails and buildings.





# CEDAR RIVER WATERSHED EDUCATION CENTER

**Seattle Water Department Watersheds  
and Environmental Services**  
Cedar Falls, Washington

*"To promote an understanding of the importance of Seattle's municipal watersheds to the health and well-being of the regional human population, and encourage the wise and efficient use of the region's water resources."*

—Mission Statement, Public Education Program  
Seattle Water Department

The mission of the Center, another important link in the Mountains to Sound Greenway, is to interpret Seattle's stewardship of the Cedar River Watershed and its role in managing water resources.

The Center provides information and exhibits about watershed wildlife and plant communities, forest and timber resources, fisheries, and related scientific research. The Education Center building and site were developed with artist Dan Corson through the City of Seattle's 1% For the Arts program. Siting and configuration of the building emphasize the native vegetation and topographic features of the area. A network of pedestrian trails with interpretive graphics connects the Center to a lakeshore recreation area and the water department's administrative headquarters.



Located on the edge of the 90,000-acre Cedar River Watershed preserve, and viewable from the Education Center, Rattlesnake Lake is the primary public recreation area provided by Seattle's water utility. The lake is a popular fishing and swimming area with spectacular views of the Cascade foothills. The expanded park will serve as a hub for three regional trails, creating an essential link in the Mountains to Sound Greenway.

Jones & Jones has guided the park and road design from master planning through construction. The new plan features conversion of the existing shoreline road to a pedestrian path, bioengineering and restoration of the riparian edge, relocation of access roads with stunning views to the lake, expansion of parking areas and upgrade of public facilities, restoration of forest and meadow landscapes, addition of loop trails with interpretive signage, and creation of a water quality wetland.





# WATERWORKS GARDENS

**Metropolitan King County Water Reclamation Plant**

with Lorna Jordan, Artist

*Renton, Washington*

Jones & Jones, working with environmental artist Lorna Jordan, developed Waterworks Gardens, an eight-acre environmental artwork. The project is a large-scale earthwork and waterwork that integrates natural stormwater treatment systems, wetland enhancement, and integrated sculptural elements. The expansion of Metropolitan King County's Renton Water Reclamation Plant and sprawling suburban growth provides a backdrop for the site which is designed to connect people with the various expressions of water and the process of water purification.

The Waterworks Gardens also links the community to a regional network of recreation trails.



Landforms, integrated artworks, native plant species, and the enhancement of an existing wetland provide a setting to immerse the visitor in an intuitive and sensory exploration of our relationship with water: industrial, aesthetic, symbolic, and reverential.



# MILL CREEK PARK

City of Kent, Department of Parks & Recreation  
with Herb Berger, Artist  
*Kent, Washington*

Jones & Jones was retained by the City of Kent Parks & Recreation Department to reclaim a small marsh into which storm water was being diverted from Mill Creek, along a steep-sided, eroding channel that had recently been constructed. Working with artist Herb Bayer through King County's 1% Art program, the earthwork park design allows the marsh to be used as a detention pond for Mill Creek storm water, while preserving its wildlife value. By redesigning the site's engineering features, the area was also opened to the public for use as a small park for informal recreation. In the future, trails will be established around the marsh, connecting it along Mill Creek Canyon to the city center.





# Rio Nuevo Master Plan

City of Tucson

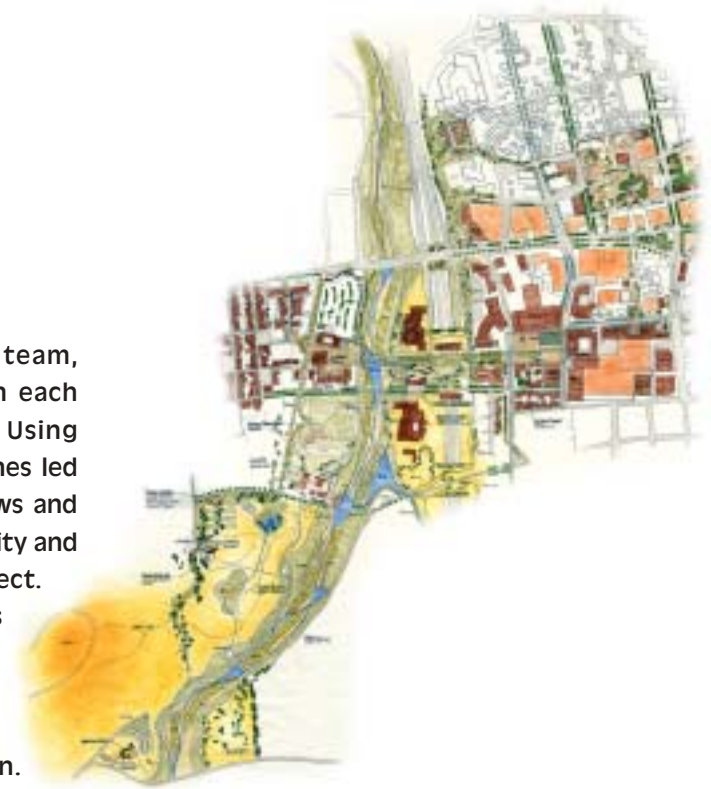
Tucson, Arizona

Tucson evolved as a community of cultures intimately connected to the mountains, the Sonoran Desert, and its rivers. As the city has grown, these connections have become tenuous, and the community is now working to re-establish them, beginning with the core of the city.

Jones & Jones collaborated with economists, architects, archaeologists, city managers, and local communities to turn the Santa Cruz River and adjacent brownfields into a visual and ecological amenity to Tucson. The resulting Rio Nuevo Master Plan establishes an improved urban fabric and provides guidelines for restoring the Santa Cruz River, bringing nature back into the city, creating connections across the interstate highway, augmenting mixed-use development, and creating a series of civic neighborhood plazas connected by pedestrian networks through the city. River restoration includes creation of a pedestrian scenic byway, use of reclaimed water, restoring riparian terraces, creating wildlife habitat to help sustain and seed native planting, and slowing water velocity to reduce erosion. The plan also creates culture and nature parks adjacent to the river, connecting regional wildlife corridors to the river and restoring historic irrigation ditches, using water from adjacent new developments.

As lead designers on the Master Plan team, Jones & Jones played an integral role in each stage of the master plan design. Using a community-based approach, Jones & Jones led numerous community charrettes, interviews and workshops to seek input from the community and develop goals and concerns for the project.

Jones & Jones made routine presentations to the Rio Nuevo Advisory Board in order to secure their support and the support of the Mayor and City Council, who approved and ratified the project for implementation. The Rio Nuevo Master Plan was awarded the "Best Master Plan" award from the Arizona Planning Association.



# US 93, MONTANA'S WILDLIFE HIGHWAY

Montana Department of Transportation,  
the Confederated Salish & Kootenai Tribes,  
and the Federal Highway Administration  
Evaro to Polson, Montana

*"The words in the agreement are about rebuilding  
a road, but the process leading up to it was about  
rebuilding trust, honor, and mutual respect."*

—D. Fred Matt, Chairman of the Tribal Council

U.S. Highway 93 is a 55-mile road that traverses the Flathead Indian Reservation along the slope of the Rocky Mountains in western Montana. The area is home to a wide variety of wildlife, including grizzly bear, white-tailed and mule deer, pronghorn, elk, painted turtles, and a number of fish and birds. It is also home to the Confederated Salish and Kootenai Tribes (CSKT).



Jones & Jones is working with representatives from the CSKT, the Montana Department of Transportation (MDT), and the Federal Highway Administration (FHWA) to design a road that is a "visitor" and is respectful of the land, the people, and the wildlife. Understanding the Spirit of the Land—the whole continuum of what is seen and touched, walked through, and driven through—provides inspiration and guidance and leads to developing ideas. This approach focuses on ways the land can shape or influence the road; restoring habitat areas fragmented by the road; respecting and restoring the way of life in small towns along the road; and giving visitors a better understanding of the place.



Design alternatives developed for the project addressed lane configuration and alignment, interpretive opportunities, landscape restoration, bike paths, visitor/cultural centers, signage, and assessment of opportunities for conservation easements.



# Duwamish Gateway Parks

**International Marine Association for the Protection of Aquatic Life**

*Duwamish River, Seattle, Washington*



The International Marine Association for the Protection of Aquatic Life (I'M A PAL) is acting as a catalyst for environmental restoration and community building along the Duwamish River corridor.

The Gateway Parks represent in microcosm what needs to take place along the whole Duwamish River—restoring health to the watershed, creating a web of green community spaces, and providing native wildlife habitats. The Duwamish River Revival attains this in a joint Arbor Day/Earth Day celebration. Several hundred adults, and schoolchildren, including members of the Duwamish Tribe participated in the planting of 400 shrubs and 100 trees.

The Gateway Parks provide ongoing activity and educational opportunities for the neighborhoods. Concord Elementary School students monitor the site regularly for wildlife activity and plant survival. Neighbors on the Georgetown side of the river volunteered to be park stewards—watering, weeding, and monitoring the park until the City was able to take over.



# DUWAMISH RIVERFRONT REVIVAL

**Environmental Coalition of South Seattle**  
with Anchor Environmental  
*Seattle, Washington*

The Duwamish Riverfront Revival is a shoreline salmon habitat restoration being developed on the west side of the Duwamish River between the South Park Bridge and Duwamish Waterway Park. The goals of the project are to increase the quality and quantity of habitat for juvenile salmon, while maintaining the shoreline in a form that protects adjacent land uses. The project will provide an important habitat stepping stone for outmigrating Chinook, Coho, Chum, and Steelhead in the Lower Duwamish, while illustrating the cooperation of public agencies and private landowners that is fundamental to salmon recovery.

The project illustrates a range of innovative restoration techniques. For example, street ends on Rose Street and 14th Avenue will be improved as “street sloughs,” wide coves of emergent marsh vegetation contiguous with a wide marsh bench in the upper intertidal range. The Duwamish Riverfront Revival will make ecological restoration visible to the public and will create a distinctive gateway to the South Park neighborhood.





# CESAR CHAVEZ PARK

Sea-Mar Community Health Center  
Seattle, Washington

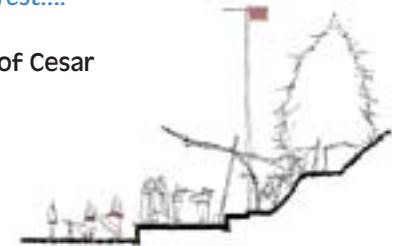
*"...he would follow a river up until it became  
a tiny stream in the forest, and there he could rest...."*

—Tina Dickey, Seattle friend of Cesar

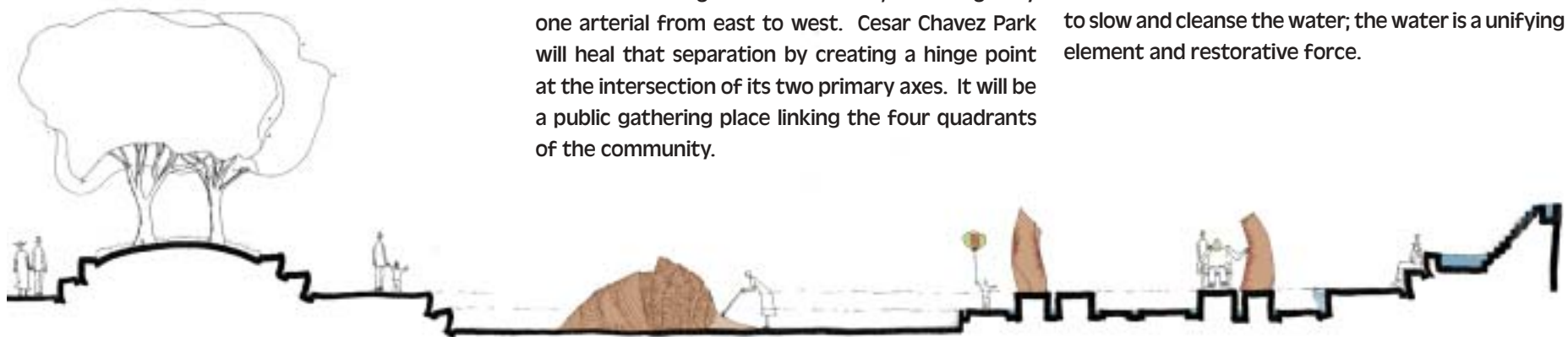
Located in the heart of South Park, a predominately Hispanic neighborhood of Seattle, Cesar Chavez Park is dedicated to a man who was a crusader for human rights and environmental justice. Sited in what was once the Duwamish River floodplain and historic Italian farmland, and drawing symbolic reference to Mayan and Mexican cultures of water, maize, and sun, Jones & Jones developed a place for human interaction and community building.



The park property is a surplus triangular utility corridor with limited building potential, adjacent to a highway overpass in the geographic center of the neighborhood. When the highway was built, it sliced the neighborhood in half, retaining only one arterial from east to west. Cesar Chavez Park will heal that separation by creating a hinge point at the intersection of its two primary axes. It will be a public gathering place linking the four quadrants of the community.



Abstracting terraced farming techniques, water movement, and farmer's furrows, the granite and concrete forms emerge from the ground plane and terrace the highway embankment. Paths and seat walls ring a theater space for impromptu performances and public gatherings. Terracing the steep highway embankment with coniferous trees buffers the park and adjacent residences from road noise and dust. A *kiosko*, or stage, is formed where the seatwall widens. Runoff from the highway approach will be diverted through a vegetated swale to slow and cleanse the water; the water is a unifying element and restorative force.



# HAT 'N BOOTS PARK

Georgetown Community Council  
Seattle, Washington

*"I am drawn to the bones scheme because it is more romantic and mysterious with separate little areas. You can choose your own way through the park."*

—Georgetown resident

Since February 2001, Jones & Jones has been working with Georgetown neighborhood residents and the Seattle Parks Department on a new park.

The aesthetic concept identified for the park was an "industrial-artistic-cowboy" theme—a theme in keeping with key characteristics of the neighborhood. Residents had expressed a desire for the park to contain such elements as the historic Hat n' Boots structures, a P-Patch, community garden, children's play equipment, open space, gathering places, and native plantings.



The design for Georgetown Neighborhood Park is inspired by the industrial history of the site and Georgetown and the quirky architecture of the Hat n' Boots. A series of low concrete walls, the "bones," retain garden terraces, create places to sit, disappear into landforms, reappear in tall grass, and so on. A large crescent dune landform wraps around the space of the Hat forming an amphitheater, while shielding the park from Corson Avenue. A cut through this berm makes a dramatic entrance to the park. Garden terraces on the Carleton Avenue side rise up to catch the sun and give another perspective on the Hat n' Boots. One terrace is sunken; another pops up and stretches into the sidewalk, inviting neighbors into the park.

The park will be constructed in the summer of 2002.



# REDMOND RIVERWALK

City of Redmond

*Redmond, Washington*

Redmond RiverWalk presents preliminary concepts for improving the natural, recreational, and community environment along the Sammamish River through Redmond.

RiverWalk includes ideas for restoring fish and wildlife habitat, recreating the river's identity as an important community and visual asset, and creating strong connections between the river corridor and downtown. Jones & Jones prepared the concept plan and promotional materials and advised habitat restoration planners. We continue to provide ongoing assistance in project implementation.

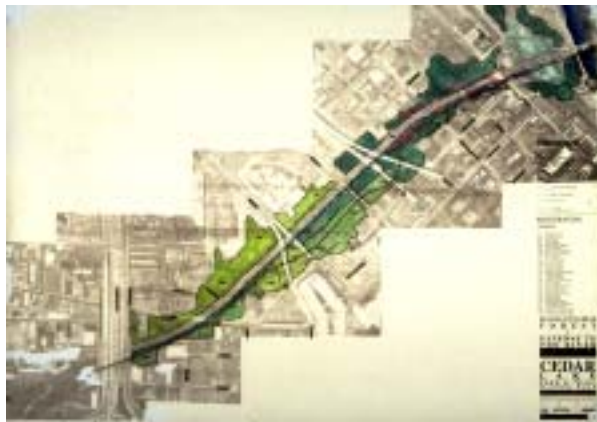


# CEDAR LAKE PARK & TRAIL

**Minneapolis Park and Recreation Board**  
**Save Cedar Lake Park Citizens Advisory Committee**  
with Richard Haag Associates  
*Minneapolis, Minnesota*

An active citizen's committee worked with the Minneapolis Park and Recreation Board to convert an abandoned railroad right-of-way into a bicycle commuter corridor, linking residential neighborhoods with the heart of downtown Minneapolis.

Jones & Jones teamed with Richard Haag Associates to create the master plan and construction documents for this pedestrian and bicycle trail and for the adjacent Cedar Lake Park nature conservancy.



*"The design team is infected with the same spirit as the citizens who have been guiding the process for over six years: a spirit about how to live in harmony with nature."*

—Dan Dailey  
Save Cedar Lake Park



An important feature of the project is the 4.3-mile pedestrian and bike commuter trail connecting a suburb with downtown and the Mississippi River waterfront.





## REFERENCES

*"It meant going in and trying to figure out how to think of  
a river as one organism, and think of it as a client,  
and design for it."*

— Grant Jones

## EAST RAIL CORRIDOR

*Madison, Wisconsin*

"Jones & Jones did a great job for us on a tight schedule and a shoestring budget. They clearly have a deep and passionate interest in the local relevance of their work—the amount of their own time that they spent in Madison looking at the site, poking around nearby neighborhoods, and talking to local people was remarkable. They were also adept at taking the limitations of our site (which, like the Airline Yards, is a disinvested brownfield and former railyard) and turning them into accessible design that really connected with what the public wanted. The open space concept they prepared for us celebrates Madison's natural, industrial, and cultural heritage, while still looking like a fun, inviting, very human (and very urban) place to play and hang out. Finally, Jones & Jones proved extremely good at creating designs that thoughtfully treated the park's diverse edges: between park and housing, park and industry, and park and commercial uses."

### **Hal Cohen**

Project Manager, East Rail Corridor  
**Urban Open Space Foundation**  
608 255 9877

## DENVER COMMONS

*Denver, Colorado*

"Intellectual sparks fly. What distinguishes their work is that they are constantly searching for some sort of truth. The force of Grant and Ilze's vision is extraordinary."

### **Mark Johnson**

Principal  
**Civitas, Inc.**  
303 571 0053  
mjohnson@civitasinc.com

## CEDAR LAKE PARK & TRAIL

*Minneapolis, Minnesota*

"I am writing as a reference for the fine work that Jones & Jones performed for the City of Minneapolis and the Cedar Lake Park Association. Jones & Jones was instrumental in transforming the abandoned railroad switching yards, surplus land and active right-of-way on the north end of Cedar Lake into a nearly four mile prairie/wetland restoration. This work included a nationally award-winning commuter bicycle trail that linked residential neighborhoods with downtown Minneapolis, and served as a catalyst for the development of an extensive city and regional trail network. It was a critical step in realizing our vision to create a new community with nature. Jones & Jones served us well."

### **Keith Prussing**

President  
**Cedar Lake Park Association**  
612 872 6633



## US93—MONTANA'S WILDLIFE HIGHWAY

*Evarto to Polson, Montana*

"For more than ten years, my clients, the Confederated Salish and Kootenai Tribes, had been at a stalemate with the State of Montana and the U.S. Federal Highway Administration over how to reconstruct US Highway 93 across a portion of the Flathead Indian Reservation. We turned to Jones & Jones for help, and they provided the resourcefulness needed to get beyond this stalemate. In December 2000, the three governments signed an agreement that lays out a design concept for the highway, which will meet the economic, environmental, cultural, social, and safety needs of motorists and residents along the route. I have great respect for Jones & Jones, not just because they helped us achieve an unprecedented level of environmental and cultural protection in road design, but also because they helped with forging a new and healthier relationship between the governments involved in the US93 project."

### **Joe Hovenkotter**

Senior Staff Attorney

**Confederated Salish and Kootenai Tribes**

406 675 2700

[joehovenkotter@cskt.org](mailto:joehovenkotter@cskt.org)

## SANDPOINT PENINSULA

*Seattle, Washington*

"Jones & Jones's master plans have guided the restoration of the 350-acre Sandpoint Peninsula for over twenty five years, during a series of incremental conversions from Navy airfield to City park. The final Navy withdrawal in 1998 launched the second comprehensive Jones & Jones master plan update for ecological restoration of native vegetation and wetlands. Without Jones & Jones, Warren Magnuson Park could never have happened."

### **Tom Byers**

Founding Partner

**Cedar River Group**

Former Deputy Mayor, Seattle

206 223 9383

## DUWAMISH RIVERFRONT REVIVAL

*Seattle, Washington*

"I am very familiar with the work of Jones & Jones. They have been active for over twenty years in projects on the Duwamish, Seattle's urban industrialized river. Recently, ECOSSE had the fortune of hiring them for the Duwamish Riverfront Revival. Ours is a difficult riverfront site in a diverse and challenged neighborhood. I have been very impressed with their analytical and communication skills. I have also been moved by their capacity to merge the needs of our community with their own expansive vision. They became a voice for the land, the river, and the salmon. A deeper understanding of the landscape became the common ground on which our community could build consensus. Jones & Jones really impressed our community with their creativity and sensitivity to our specific circumstances. I highly recommend them and their work."

### **Charlie Cunniff**

Executive Director

**Environmental Coalition of South Seattle**

206 767 0432

[charlie@ecosse.org](mailto:charlie@ecosse.org)







# B 1

PARTNER: **APPLIED ECOLOGICAL SERVICES, INC.**

*"We put the success of each project ahead of an individual designer. There is no one star in our office or on our teams. We typically form a team of different professional disciplines to **promote cross-fertilization**. We learn from each other, and our projects are enriched."*

— Ilze Jones

# APPLIED ECOLOGICAL SERVICES, INC.

Applied Ecological Services, Inc., is a broad-based ecological consulting, contracting, and restoration firm providing services to foundations, governmental units, corporations, and commercial/residential developers nationwide. Established in 1978, AES has a total staff of more than 60 employees, with consulting offices in West Dundee, Illinois, Brodhead, Wisconsin, and Minneapolis, Minnesota. At its southern Wisconsin headquarters, AES owns and operates Taylor Creek Restoration Nurseries, one of the largest native prairie nurseries in the Midwest.

AES's staff of over 20 consultants, including ecologists, botanists, wildlife biologists, wetland scientists, prairie and ecosystem restoration specialists, and landscape architects and designers conduct approximately 100 projects per year. AES often teams with other firms with expertise in land planning, engineering, architecture, and landscape architecture to conduct master planning projects that present difficult environmental challenges or that require sensitivity to natural resources.

Specific areas of environmental expertise and service include inventory and assessment of natural resources; wetland delineation, mitigation and mitigation banking; environmental permitting; ecological restoration planning; prairie, wetland and woodland restoration and management; wildlife, fisheries, and botanical studies; long-term project management and monitoring; watershed planning; alternative stormwater management planning; park and trail system design; streambank and shoreline bioengineering; ecological research and other scientific studies; and expert testimony and legal discovery.

The majority of AES projects focus on research, design, restoration and management of natural systems, often as integrated elements within development projects. The company often plays a key role in the resolution of potential conflicts between development interests and the preservation of natural systems. Frequently, in these situations, AES is able to provide creative design strategies that minimize or eliminate adverse ecological impacts while favoring aesthetics and other strategies which enhance the marketability of a development.

AES is a leader in the design of alternative stormwater management systems for "conservation development" projects that integrate residential or commercial development with ecological systems. AES developed these natural "Stormwater Treatment Train" concepts in the early 90s when AES ecologists served on the design team for the nationally acclaimed Prairie Crossing conservation development in Grayslake, IL. Since then, AES has designed scores of natural stormwater management systems using prairie swales, buffers, wetlands and ponds or lakes, as alternatives to traditional engineered systems in development projects. AES has also applied these innovative concepts to park and trail system designs, which provide passive recreation amenities as integral elements to active recreation areas with additional benefits for downstream surface water quality and wildlife habitat.

## *Statement of Purpose*

*...to identify where humans and nature are potentially in conflict, where humans and nature can potentially cooperate, and to provide leadership in resolving conflicts in favor of sustaining natural systems*

*...to conduct research and promote the understanding of natural systems and human interaction with them*

*...to provide professional consultation, contracting, stewardship, and native nursery services to protect the integrity of existing systems; and for the restoration and enhancement of sites requiring conscientious intervention to restore their natural processes*





# STEVEN I. APFELBAUM, MS

President, Applied Ecological Services, Inc.

Steve Apfelbaum, a senior ecologist with the Ecological Society of America, has been a full-time research and consulting ecologist with Applied Ecological Services, Inc., since 1978 when he founded the company. He has served as principal in charge or project team member on hundreds of projects, and has conducted ecological research projects in most biomes of North America. Since the early 1980s he has been one of the leading consultants and researchers in the U.S. in ecological restoration programs.

Mr. Apfelbaum is trained as an animal and plant ecologist with graduate studies at the University of Illinois, Urbana-Champaign where he earned his MS Degree in Ecological and Biological Sciences in 1978. Apfelbaum has been trained in river physics and hydrology on many hundreds of projects and under the tutelage of the premier river hydrologist Dr. Luna Leopold, former Chief of the U.S. Geological Survey, Water Resources Division. Apfelbaum has also designed hundreds of streambank and shoreline stabilization projects that frequently involve trail systems and greenway corridors, including a mile-long demonstration project on the degraded Skokie River at the Chicago Botanic Garden.

Apfelbaum has direct and related experience with the area included in the Menominee River design competition. He and AES were retained by the National Park Service in their Urban Trails Waterway Program during early design phases of the Hank Aaron Trail project to integrate it with a restored Menominee River and the proposed new Miller Park stadium. Apfelbaum assisted in studies within the limits of the design competition project of the existing conditions of the river, the upland slopes and former filled floodplains and industrial sites along the river. He then assisted in design of concepts for river restoration, removal of steel pilon river banks and bank stabilization using bioengineering techniques. Additionally, he provided restoration strategies and alternative stormwater management strategies and concepts for utilizing ecologically focused stormwater management within the project area. Many of the initial concepts have been integrated with the trail and Miller Park stadium.



AES and Apfelbaum are now providing ecological, stormwater management and construction expertise in the development of a guideline document commissioned by the City of Milwaukee that will be used for educating and directing the re-development of the

entire lower Menomonee River valley area. In early 2002, Apfelbaum prepared a contribution to the alternative stormwater management guidelines, river edge and floodplain restoration guidelines, urban heat island guidelines, and guidelines on use of native landscaping and ecological restoration in the project area.

Apfelbaum has also worked on a series of similar projects where urban river front and water front re-development has been the program focus. He was the key ecologist in the "Reinvestment Plan for Downtown Detroit, MI" and "Framework Plan for Re-development of Downtown St. Paul, MN" and several other projects where the river was the central organizing feature in the redevelopment program. In both settings, the rivers (Detroit and Mississippi Rivers) were featured in the redevelopment strategy, as were public access, education, water quality, and cultural and public realm investments.

*supporting Steve at A E S will be:*

## **JOHN DOUGLAS EPPICH, P.E., Ph.D.**

Hydrologist/Engineer

Doug Eppich is a licensed Professional Engineer in Wisconsin, Illinois, Minnesota, Indiana, Iowa, and Ohio. He received his Ph.D. in Environmental Engineering from the University of Illinois – Urbana/Champaign in 2000, focusing on the use of constructed wetlands for water quality enhancement. He received his Master of Engineering degree in Civil Engineering from Pennsylvania State University, and his BSCE degree from Iowa State University.

Dr. Eppich has exceptional expertise in alternative stormwater management planning and design. His knowledge of the design of these systems includes quantifying water quality benefits derived from the application of this technology. The resulting improvements not only adequately address the flood control aspects of stormwater management, but also provide additional benefits not normally possible with conventional systems.

Dr. Eppich's hydrologic and hydraulic project experience includes the Homewood, Illinois, biofiltration wetland system for stormwater management and treatment including post-construction monitoring of water quality and treatment effectiveness. He has also designed numerous stormwater management systems for community parks and public properties, single- and multi-family residential developments, commercial shopping centers, office projects, and wetland mitigation sites.

## **JAMES P. LUDWIG, Ph.D.**

Senior Ecologist/Ecotoxicologist

James P. Ludwig, Ph.D. was trained in zoology at the University of Michigan in population and Community Ecology, and did post-doctoral work in Great Lakes limological processes at the University of Minnesota in the School of Public Health. He has been a key participant in the ecotoxicological research teams that measured the effects of organochlorines and metals on Great Lakes wildlife species. He derived water quality standards for PCBs, TCDD and TCDD-EQs for the Great Lakes from these data directly which confirmed the U.S. EPA's Great Lakes Initiative.

Previously, he developed and implemented landscape-scale reclamation projects on landfills, flyash ponds and mined sites in the Upper Midwest, specializing in the use of native vegetation species. In 2001, he served as the AES ecologist on the winning team in the international juried competition for the conceptual design of reclamation plans at the Fresh Kills Landfill, Staten Island, New York. In his private life, Dr. Ludwig operates a 44-acre organic farm and orchard in Essex County, Ontario, and is engaged in research to develop biological means to control plant pests.

## **CARL V. KORFMACHER, MLA**

General Manager/Senior Landscape Architect (WI Reg.)

Mr. Korfmacher received his Bachelor of Arts, Biology, in 1985 from Concordia College in Moorhead, Minnesota, and his Master of Landscape Architecture degree in 1992 from Kansas State University. His emphasis in graduate school was the integration of native plant materials in designed landscapes and human perceptions of natural and designed landscapes. He is a Registered Landscape Architect in the State of Wisconsin, and a full member of the American Society of Landscape Architects.

At AES, Mr. Korfmacher has worked in team settings to design and implement a wide variety of complex projects including the Flambeau Mine reclamation in Ladysmith, Wisconsin, a 7,000-acre prairie and wetland restoration project for The Nature Conservancy in northwest Indiana and dozens of urban projects incorporating natural areas into the built environment. These projects are usually juxtaposed with water resources, for example an urban Waterfront Park in Louisville, Kentucky, on the Ohio River, or the North Avenue Dam shoreline restoration on the Milwaukee River in Milwaukee, Wisconsin.



B 2

## RELEVANT A E S PROJECTS

*"My goal has always been to bring people and ecological systems together in a way that doesn't compromise either."*

—Steve Apfelbaum



# MILWAUKEE METROPOLITAN SEWERAGE DISTRICT CONSERVATION PLAN

*Milwaukee, Wisconsin*

Applied Ecological Services, Inc. was privileged to serve as the ecological consultant on a precedent-setting project designed to identify, acquire or protect, and restore properties within three urban/suburban watersheds that would contribute toward flooding reduction in the urban areas of the Milwaukee region.

As a subconsultant to The Conservation Fund, a national non-profit organization, AES conducted broad-scale ecological assessment and mapping, combined with site-specific field investigation, to determine and prioritize localities that could help alleviate future flooding problems for Milwaukee and its surrounding suburban communities.

The study provided the scientific and practical rationale for protecting specific parcels from development, and for entering into relationships with public, private and non-profit entities to manage these properties for flood-reduction benefits, as well as other complementary benefits such as wildlife habitat, water quality and open space preservation.

Watersheds included in the study were those of the Menomonee River, Root River and Oak Creek, within the MMSD boundaries. Watercourse projections for these areas had indicated that demographic and community trends would exacerbate existing flooding problems over the next 20 years.

AES used GIS-based remote sensing techniques, including aerial photography, soils maps and wetland maps to identify more than 28,000 acres of undeveloped land containing hydric soils that could provide future flood reduction benefits. A total of 199 sites of 25 acres or more were field checked and prioritized.

Within the three watersheds, AES identified a total of 42 high priority sites, covering more than 7,000 acres, that could be acquired for flood reduction and other benefits. Additionally, another 123 sites were located, covering nearly 8,000 acres, that could also contribute to desired benefits.

In addition to prioritizing these sites, AES provided educational services and publications illustrating the benefits of flood reduction from low-impact or "conservation" development, land stewardship strategies, ecological restoration, and other non-traditional storm water management techniques.

AES also assisted in leveraging interest from public and private agencies and real estate developers in pursuing collaborative projects to incorporate watershed-sensitive designs into development.



# NEAR NORTH SIDE REDEVELOPMENT

*Minneapolis, Minnesota*

In 1999-2000, AES served as ecological team leader on a multi-disciplinary consultant team that redesigned a failing 1970's HUD development just north of downtown Minneapolis. Working in a team environment, we conducted a very complex site redevelopment process to develop detailed designs for re-development of this degraded urban area.

AES contributed alternative stormwater management and water quality engineering, native landscape design, park planning, and ecological design for "daylighting" a buried stream system. In addition, we worked within the larger design team on the overall design for mixed-use commercial and residential development, and for transportation networks to reconnect the neighborhood that had been isolated by earlier site development.

We began the ecological design process with a thorough review of contaminant issues and locations. We found opportunities for daylighting the buried stream that had been piped beneath landfilled demolition materials and was, in places, more than 30 feet below grade. We also conducted an in-depth technical review and design of strategies to improve the quality of stormwater runoff discharged to the Mississippi River.

The daylighted stream and associated central park system—with restored wetlands, prairies and expansive open spaces—became the central organizing feature of this development. The open space system also became basic to the design of a new boulevard system and the layout for new development of mixed-income single- and multi-family housing, commercial, cultural, and educational facilities including schools and churches, and local shopping facilities. The boulevard and stormwater conveyance systems are designed to meander along pedestrian walkways.

AES was part of a team that included SRF, Inc., Barr Engineering, Inc., Close Landscape Architects, and the developer assisting the City of Minneapolis.



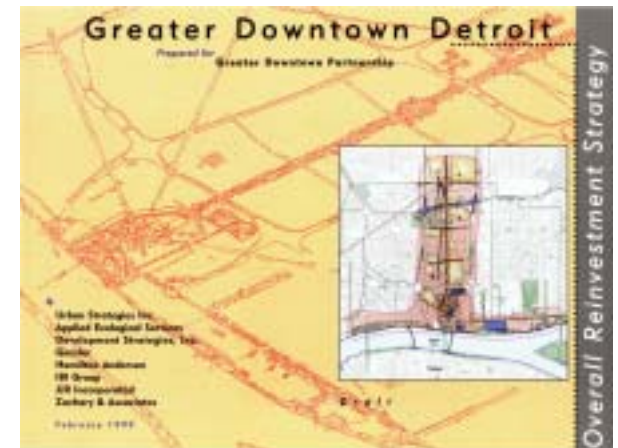
# DETROIT MICHIGAN URBAN CORE REINVESTMENT PLAN

*Detroit, Michigan*

AES was involved in a major study exploring reinvestment opportunities for five square miles of downtown Detroit, Michigan, between the Ambassador Bridge and Belle Island. The process involved characterizing existing conditions of built landscapes, natural landscapes, and financial, economic, and social environments. With participation from local expertise and stakeholder groups, a series of workshops was held to identify proposed directions of change that allowed opportunities for reinvestment. The workshops focused on connecting downtown Detroit with the Detroit Riverfront by taking formerly industrial landscapes and softening, or "greening" them to provide a green infrastructure, improved water quality, and a system of passive recreational parks.

AES provided design concepts for softening and stabilizing deteriorated river shorelines. Concept designs were jointly prepared by AES and other partners from the Detroit area. AES also assisted in addressing the development potential of contaminated brownfield sites, reconnecting Detroit with the river, providing connections between regional greenways, and addressing fishing opportunities along the Detroit River.

The history of industrial development along the Detroit River was a major area of inquiry in our attempt to develop a reinvestment strategy. In addition, recognizing the history of social change and racial issues became key elements in understanding the long-standing inability of Detroit to reshape its future. The framework plan captured the inspiration and vision of the many community leaders and local stakeholders. Major initiatives for reinvestment and redevelopment are being undertaken as a direct result of this project. AES had the pleasure of working on this project with several local firms, the City of Detroit staff, the Greater Downtown Detroit Partnership, and others.





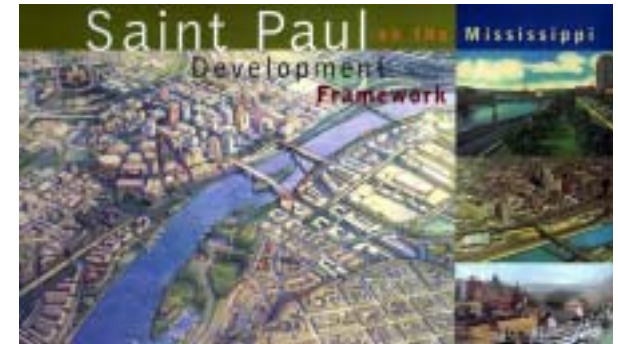
# ST. PAUL RIVERFRONT FRAMEWORK PLAN

*St. Paul, Minnesota*

In 1996-97, AES was asked to provide ecological expertise on a multi-disciplinary team engaged in planning the redevelopment of three square miles of downtown St. Paul, Minnesota. The project area included several miles of the Mississippi River waterfront and involved extensive public participation in a series of charrettes with different neighborhoods to obtain broad consensus in the design of concept plans for redevelopment of the communities. In addition, the project team developed a variety of funding sources, completed grant applications, and held meetings with philanthropic foundations and land developers interested in the redevelopment effort.

AES was responsible for addressing storm water management, water quality enhancement, greenway connections along the river through the urban core of St. Paul, and for the integration of natural landscapes within the redeveloped downtown area. The planning team also conducted a detailed examination of traffic, existing roads, the "built" environment, economics and financial considerations, brownfield redevelopment, and opportunities for re-connecting St. Paul's urban core with the Mississippi River.

Working in partnership with the planning firm of Urban Strategies, Inc., of Toronto, Ontario, AES contributed ecological perspectives that provided inspiration and vision for an innovative framework plan that will lead the redevelopment of downtown St. Paul for decades to come. The project team coordinated its planning process with the St. Paul Riverfront Corporation, Greening the Great River Park, the City of St. Paul, and many other non-profit organizations, including civic groups.



# LIBERTY MASTER PLAN

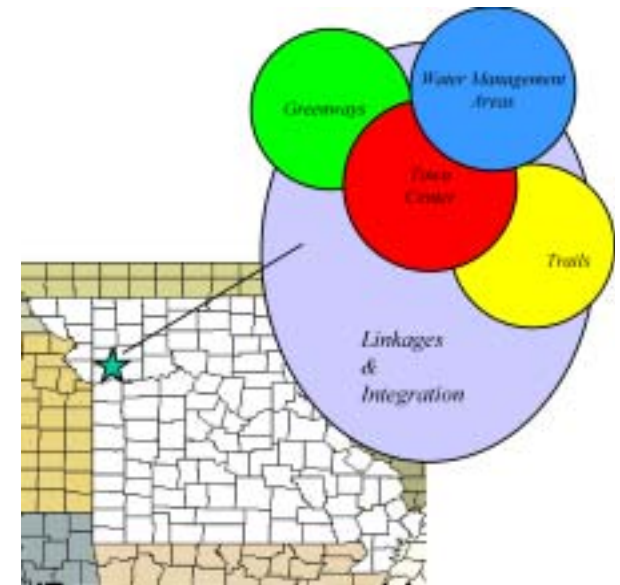
*Liberty, Missouri*

The City of Liberty, Missouri, retained the team of Applied Ecological Services and Land Planning Services, Inc. (LPS) to update its Master Plan. A master planning goal was integrating traditional neighborhood development plans with the protection of high quality ecological and cultural resources (including historic homes, buildings, and structures).

Key ecological resources and sensitive areas were mapped across a 50 square mile survey area. The team documented environmental problems such as flooding, stream bank and other critical erosion locations, as well as water quality deterioration associated with the rapid rate of urban sprawl occurring in and around the suburbs of Kansas City.

The AES/LPS planning process resulted in a community built Master Plan that kept ever at the fore the goal of integrating economic development, ecological resources (including water quality), and the culture of the community. Integrated planning saves financial resources for the community as a whole and for developers in particular. The process helps to resolve conflicts between places, people, and the environment.

AES/LPS produced, in addition to the Master Plan document, a geographic information system (GIS) spatial data base to help Liberty with the implementation of their updated Master Plan. The digital data base included not only the resource maps that identified susceptible areas and high priority restoration and management areas, but also a framework for linking natural stormwater treatment systems with recreational greenways and trail systems throughout the city.



# FRESH KILLS LANDFILL REDEVELOPMENT

*New York City, New York*

Applied Ecological Services served as the ecological leader on an international multi-disciplinary design team that won the juried competition to develop conceptual plans for the redevelopment of Fresh Kills Landfill on Staten Island in New York City. The competition was one of the largest juried international design competitions that has ever taken place.

Fresh Kills is the largest landfill in the world, covering 2,200 acres (nearly four square miles), and has been in operation since 1948. The landfill was closed in 2001, only to be partially re-opened in September 2001 to receive wreckage from the World Trade Center which was destroyed by the September 11 terrorist attack.

AES provided specialized ecological consulting and design services on a multi-firm team led by Field Operations, Inc., Philadelphia, (PA), a nationally-known landscape architectural firm.

The majority of the open space at the 2,200-acre site will be restored to native vegetation communities—savannas, prairies and wetlands, including some rare ecological communities—for passive recreation and public open space.

In addition, vital elements in the winning conceptual design also included sports fields, equestrian facilities, miles of hiking and biking trails, a heron rookery and bird nesting island, canoeing facilities, and, importantly, a memorial to the victims of the September 11 terrorist attack.

The vast majority of the site is planned for restoration of a mosaic of ecological communities, including rare communities such as the globally endangered swamp magnolia ecosystem that exists only in small patches of remnants on Staten Island. The magnolia bog will be located adjacent to the active recreation area, and will be dissected by a boardwalk to provide public access and educational programming about threatened and endangered ecosystems.









# B 3

## A E S REFERENCES

*"A prairie is a wonderful, ongoing epic. I hate growing old quickly, but I really look forward to seeing what will happen to my prairie plants from year to year. It's a very rich experience."*

-Steve Apfelbaum

## **MMSD CONSERVATION PLAN**

Flooding Reduction Through  
Property Acquisition

**Peg Kohring**

**The Conservation Fund**  
PO Box 506  
Sawyer MI 49125  
616 426 8825

## **LENEXA STORMWATER PLAN**

Ecologically-Sensitive  
Stormwater Management Plan

**Tom Jacobs**

Environmental Program Director  
**Mid-America Regional Council**  
600 Broadway, Suite 300  
Kansas City MO 64105  
816 474 4240

## **PRAIRIE LAKES**

Wetland Biofiltration  
Design & Monitoring

**Mike Nemitz**

Health and Environment Coordinator  
**Village of Homewood**  
17755 South Ashland Avenue  
Homewood IL 60430  
708 206 3479

## **PRAIRIE CROSSING**

Residential Conservation Development  
Alternative Stormwater Management

**Mike Sands, Ph.D.**

Environmental Team Leader  
**Prairie Crossing/Liberty Prairie Foundation**  
32400 North Harris Road  
Grayslake IL 60030  
847 548 4062

## **LIBERTY, MISSOURI COMPREHENSIVE PLAN**

Ecological Assessment and  
Stormwater Management Planning

**Bonnie Johnson**

Planner  
**Johnson County KS Planning Department**  
111 S Cherry, Suite 3500  
Olathe KS 66061  
913 715 2230

## **THE GROVE ECOLOGICAL RESTORATION**

Wetland Restoration,  
Stormwater Management Planning

**Steve Swanson**

**The Grove National Historic Site**  
1421 North Milwaukee Road  
Glenview, IL 60025-1436  
847 299 6096



*“There’s no telling what the power of the people and  
the river can do.”*

—Pete Seeger

*Beyond the open door, shadows bend...  
Whose ears hear water; near that tree  
Who grew a stream.  
Birds appear and disappear  
My waterface makes friends  
Whose eyes see clouds of wind in my hair.  
What's that hole?  
Deepness doesn't move.  
Who are those beyond the leaves?*

*Take my hand.*

—Grant Jones