

SUSTAINABLE OPEN SPACE

Ample Opportunity: A Community Dialogue 4

Thursday, October 23, 1997

Introduction: The last workshop explored the meaning of three aspects of sustainability in the context of urban open space: economy, ecology and community. The keynote speaker, Jack Ahern, presented the different roles of greenways. Roundtable subjects examined economy, ecology, and community issues. Each roundtable was asked to develop a graphic vision for the Nine Mile Run Greenway applying the issues investigated at previous workshops.

Review: This was an evening event with a tour the following Saturday. The event was well attended and the move to a "graphic vision" development phase was successful with diverse concepts and ideas recorded on paper. However, it provided an opportunity to reconsider the relationship of Nine Mile Run to Frick Park as well as identify major user groups and their specific concerns.

Attendance: 80

Advisors:

Joan S. Blaustein, *Urban Planner, Department of City Planning in Pittsburgh.*

As Manager of Special Projects, she is responsible for administering and directing a variety of projects, including the Nine Mile Run Open Space Project and related grant programs, such as the River Conservation Plan. Other projects involve developing a public art plan for the city; managing the Federal Enterprise Community program; and participating in the Strategic Parks Initiative and the Downtown Plan.

Jim DeAngelis, *Graduate School of Public and International Affairs, University of Pittsburgh.*

Mr. DeAngelis's research interests investigate the

applications of planning and development through neighborhood, municipal, regional, and state organizations.

Judith Hull, *Architectural and Landscape Historian.* Dr. Hull is currently working on the history of Trinity Church in New York City. She is a Research Associate with the University of Pittsburgh, Department of Modern and Contemporary Art History.

Larry Ridenour, *Landscape Architect with a specialty in recreation and trails.*

Mr. Ridenour worked in the Allegheny County Planning Department for 11 years where he coordinated the planning, acquisition, design development, and long-term management of Rail-Trail projects and coordinated the county's efforts relating to riverfront conservation and development.

Kirk Savage, *Art Historian at the University of Pittsburgh.*

Mr. Savage work focuses on monuments and public art. His current book, *Standing Soldiers, Kneeling Slaves: Race, War, and Monument in 19th-Century America*, has been recently published by the Princeton University Press.

Ken Tamminga, *Assistant Professor of Landscape Architecture, Pennsylvania State University.*

Mr. Tamminga's research focuses on ecological planning in urban regions. He has extensive experience in urban open space planning in Ontario, including the preparation of the Rouge Valley Park Management Plan and the Lower Don River Valley lands Study.

Ample Opportunity: A Community Dialogue 4

Sustainable Open Space Advisory Group
Background Document

*When cities are built upon
beautiful, dramatic or rich sites,
their excellence often results from
preservation, exploitation and
enhancement, rather than
obliteration of this genius of the
site.*

—Ian McHarg
Design with Nature



3-D topographical model of the Nine Mile Run development site.



Looking toward the slag heap from the small community of Duck Hollow.

Introduction

*In many respects, building a greenway is the easy part. In fact, participants in the Ample Opportunity Workshop have pointed out that many elements of a greenway already exist in the valley of Nine Mile Run. The hard part is to nurture and maintain a greenway for years and generations. That is why the Nine Mile Run Greenway Team has chosen sustainable open space as the subject of the last workshop of the Ample Opportunity: Community Dialogue series. As we consider the meaning of **sustainable open space**, we can look at ideas of economic, biological and cultural sustainability.*

From an economic point of view, we need to consider the fact that the existing city parks are infrastructure and maintenance intensive. How do we create a park that needs care (because anything in life worth having requires maintenance and care) but becomes self sustaining?

From the biological point of view, ecologists consider biodiversity to be the key measure of sustainability for plant and wildlife communities. Biodiversity indicates genealogical diversity or the potential for nature to adapt to minor and major changes in the environment. How do we create a park that can react to minor and major changes in the economic environment as well as the natural environment?

To create a sustainable open space we need to establish public lands rooted in a caring community. We need to learn to leverage emerging brownfield development to reestablish our relationship to our urban environment.

I. The Basis for Community Dialogue

What is the effect of my participation in *Ample Opportunity: A Community Dialogue*?

The question of influence and the decision-making process has reoccurred throughout the workshop series. As a non-traditional, non-governmental process, the Nine Mile Run Greenway Project cannot provide a definitive answer. (Arguably, that answer can only come from the city government landowner and regulator.) Instead, we can learn a lesson by looking back to make a prediction that will lead us forward.

At the first workshop of the *Ample Opportunity: A Community Dialogue* series titled "History, Context and Public Policy," we learned that two important civic committees highlighted the Nine Mile Run valley for its potential as an urban park to serve a growing urban populace.

The first, the Pittsburgh Civic Commission formed in 1909 by Mayor George Guthrie, retained Frederick Law Olmsted, Jr. to report on Pittsburgh's parks and boulevards. Olmsted's report for the commission, published in 1911, recognized that "the most striking opportunity noted for a large park is the valley of Nine Mile Run." However, Mayor Guthrie left office in 1909 and was replaced by William Magee, who had little use for the commission or the open space ideals set out in the Olmsted report.

After World War I, prominent Pittsburgh businessmen, organized by Mellon Bank's chief executive officer, Richard B. Mellon, formed the Citizens' Committee on City Plan. The Citizens' Committee consisted of prominent professionals and businessmen and carried significant influence. It contained a subcommittee on recreation that recommended public funds be used to construct a botanical garden, tennis courts, picnic grounds, and a lake in the Nine Mile Run valley. However, these recommendations were lost in the ensuing public debate leading to Pittsburgh's first zoning code.¹ During the time the proposed zoning code was being debated, Duquesne Slag purchased 94 acres from a private estate. Since this purchase was made the year

WORKSHOP GOALS

Participants in the Sustainable Open Space workshop will:

- Explore the definition and functions of greenways.
- Appreciate the roles of parks and open spaces in a region around Nine Mile Run.
- Identify, analyze and evaluate physical, natural, institutional, cultural, and recreational resources in the Nine Mile Run watershed.
- Understand cause and effect relationships of the contextual issues and development concerns associated with a Nine Mile Run Greenway.

"We can't forget what our industrial past has done or even our industrial present is doing, we have to look at those costs and you can turn around and look at it and say, oh my gosh that is ugly, but we still have to look at this and say this is the result of the steel industry. I think there is a lot of social value in recognizing that."

—Loree Speedy

¹ Andrew S. McElwaine, unpublished research, *Slag in the Park, A History of Nine Mile Run*, 1997.

before the zoning code was enacted, industrial use of the Nine Mile Run valley was established and sustained until the 1970s. Again, the Citizens' Committee influence was not enough to have open space protections included in the zoning code or to allocate public funds to expand Frick Park.

In both of these historic accounts, there was no constituency large enough to have the vision of a park in the valley last through changes in city leadership or expansive public policy debates. Learning from these experiences, it appears that an effort to create a greenway in the Nine Mile Run valley needs a broader and larger constituency than has existed in the past. If such a constituency can grow from the seeds sowed by the Nine Mile Run Greenway Project, there is no limit to the influence this work can have.

"There seems to be consensus around that we would like some passive park development in the valley and we would like the stream cleaned up. And probably agree on a gradual minimalist restoration of the slag heap, using the ability of the land to reconstitute itself. The minimalist reconstruction is not a big dollar item, the passive park is not a big dollar item, but...the cleaning of the stream is a big dollar item. We will have to be really creative to get the money, or fight like the devil, or probably both, to get this done."
—Jonathon Robison

"Who is the person, or group making the decisions on culverting? We need to influence that decision."
—Rita Schaier

Stream remediation: Process of returning stream to pre-industrial, non-polluted state.

Slag: Waste product of steel production

"If there is regrading, all the existing vegetation goes down the tubes."
—Peggy Charney

"If the greenway philosophy can be more defined early on it would be reassuring to many people."
—Allan, Squirrel Hill resident

What purpose have the workshops served so far?

Workshop participants have expressed frustration throughout that a definition of the greenway does not exist. The intent of the workshop series was not to present a greenway vision, but to let one develop through informed dialogue.

The integration of critical thinking with the democratic process creates a vibrancy from which previously overlooked concepts get considered. The exercise established by the workshop series has led toward a consensus around a vision of a water-centered greenway, with a clean, healthy flowing stream paralleled with trails for hikers and bicycles, connecting Frick Park to the Monongahela River. More detailed design is hampered by a number of unresolved issues. Further definition requires continued citizen participation in the planning process to address issues relating to the stream, slopes, and uses.

What was discussed at the previous workshops?

Over the last four months the Greenway team has worked to outline issues specific to the open space by developing advisory groups of academics and professionals, then producing an event to discuss those issues publicly. The three issues have been:

- 1) History, Context and Public Policy: An overview of how the Nine Mile Run site became what it is today and how we can work within the existing public structure to provide input into what it will become. The roundtables featured discussions with professionals from history, planning, and public policy.
- 2) Stream Remediation: The history of the problem and complexity of the solution. This included an analysis of the existing stream problems and various approaches to solving them. The roundtables featured discussions with government officials and professionals about the nature of the problem and how citizens can get involved.
- 3) Community and Ecology: Slag, Soil, Plants and Wildlife: Focused on the idea of community defined in ecological terms (people in relationship with nature). This included an analysis of the systemic relationships and problems faced when attempting to revegetate and sustain plant growth on an artificial material like slag. The roundtables featured discussion with professionals experienced in all four areas.

What questions will be discussed at the final workshop?

The *Ample Opportunity* workshops have coalesced a group of citizens that recognize the opportunity of the site. After three meetings on the open space, there are specific issues being raised consistently by our citizen participants. We will use these issues as focus points

during our roundtable discussions on the form, function, and philosophy of the Nine Mile Run Greenway: The most prominent issues are:

1. What is the greenway? There is a consistent request to define the philosophy and form of this greenway. The definition provided by keynote speaker Jack Ahern, suggests that greenways are multi-functional, that we must identify the ecological, cultural, social, and aesthetic goals for each site. We must consider the "ownership of the site." How do we make it accessible and available to the widest community use?

2. How will grading affect the greenway? The grading plan has gone through a slow evolution. Many of our citizen participants have pointed out that the final form of the greenway will be dictated by the movement of slag on the site. The actual regrading of this site, and finding a proven method to revegetate the existing steep slopes has been a slow and complicated process. The city and the development team have been working to find a balance in terms of cost and quality of the resulting environment. At this point, the development team has outlined two potential approaches to site grading: Option 1, provides a relatively accessible 2-1 slope by culverting a portion of the stream and moving more of the slag. This will provide a broad flat park by filling the remaining river valley. Option 2, maintains the stream in its current condition and moves less of the slag. This will retain much of the existing growth, but leave us with the existing steep slopes, a park much like the area in upper Frick. These two options are currently under aesthetic, cost, and value analysis by the development team. It is our understanding that more information on the regrading schemes will be available by the time of our final workshop. These two final landform options will provide a basis for the roundtables to discuss initial ideas about open space access, use, and view options.

3. Why can't the stream be cleaned up? A clean stream is the most consistently requested outcome in the roundtable discussions. Our stream remediation workshop brought together specific experts to discuss the how and why of the pollution problems of Nine Mile Run. For this final workshop, the problems will be outlined so that the roundtables can explore ideas to get people involved in the resolution of this 90-year-old issue.

4. How can we help more people appreciate the lessons of the valley? Education, education, education has been a consistent focus of the roundtables from the previous workshops. It is widely felt that the problems and solutions that occur while Nine Mile Run is reclaimed and revegetated will provide a living classroom opportunity. Education also becomes a citizen awareness issue during discussion of a "Friends of Nine Mile Run" citizen group or a watershed authority.

5. How will we accomplish these goals in the workshop?

Each of the roundtables at this final workshop will discuss the form, function, and philosophy of the Nine Mile Run Greenway. Each roundtable will be assisted by a landscape architect and artist. Advisors from previous workshops will be asked to return to participate in the discussions as resource persons. Each roundtable will capture opportunities, ideas, visions, and challenges concerning the greenway on maps of the stream valley. Participants will also be asked to identify physical, natural, institutional, cultural, and recreational resources in the study area. The result will be a visual representation of the greenway ideals distilled from the workshop participants. The workshop will close with a presentation of the greenway concepts by the roundtable leaders.

Greenways: Networks of land containing linear elements that are planned, designed and managed for multiple purposes including ecological, recreational, cultural, aesthetic, and other purposes compatible with the concept of sustainable land use.

Regrading: Altering the slope and mass of the slag heap to achieve a particular development footprint.

"I understand they originally wanted to move 4.2 million tons of slag, and now they are 2.2 million, they are talking about moving less and less slag."
—Paul Peffer

"This cannot be an effective greenway without cleaning up the water."
—Paul Peffer

"This place can be a valuable site for education for all ages!"
—Anne Mates

"I'd like to paint big blue stripes across all the streets at the edge of the watershed."
—Dean Benjamin



Can you think of words or images that describe:
 the ecology of the lands surrounding Nine Mile Run?
 the culture and community of the surrounding open spaces?
 the recreational opportunities presented by the stream valley?
 the social organizations that support adjacent open space uses
 and experiences that define the "sense of place"?

II. Physical Models for Public Open Space

*"Yes, we want a place to attract people to the city, we need to know that what may attract say Tom, or what may not attract me or you. This is a slippery question."
 —Peggy Charney*

What might this "open space" or "greenway" look like?

As we begin to think about a park for the 21st century what might we be considering? Of the local parks, which relates best to Nine Mile Run? Which of them have similar landscapes? Which of them have elements that you really enjoy? Which of them provide a good model? Which provide a bad model and why?

The city of Pittsburgh has numerous parks each a little different in design and intent. Most of Pittsburgh's parks were developed over a 40-year period spanning the turn of the last century. Highland Park and Schenley Park were developed in 1889, Riverview Park in 1894 and Frick Park in 1919. More recent park developments include the Mellon Park in 1943, and Point State Park in 1969. If we stop to consider these parks, each one reflects the ideas about parks and recreation existing at the time it was developed.

Let's consider the look and feel of the "typical" parks near the Nine Mile Run site (within a 2.5 mile radius). We will explore Frick Park in the most depth due to its adjacent location and the history of attempts to establish this link to the Monongahela.

Arcadian tradition: Could be defined as a romantic vision of an idyllic, pastoral landscape. It refers to the Arcadia region in ancient Greece traditionally known for the contented pastoral innocence of its people.

Frick Park— nature preserve, urban wilderness or unusable wooded valley?

Like most city parks, Frick Park² is remarkably varied, encompassing a nature reserve, lawn bowling, tennis courts, three soccer fields, a ball field, and two playgrounds. At the same time the central core of Frick Park is primarily wooded, no roads pass through the park and the infrastructure mentioned above is primarily on the perimeter of the park, by design.

Frick Park was initially part of a 150-acre donation to the city made at the request of Henry Clay Frick's daughter. The initial idea for Frick Park emerges from an Arcadian tradition of parks development that is rural appearing and undeveloped. In addition to the land, Mr. Frick provided

² History is summarized from Maxwell, M., 1985. "Pittsburgh's Frick Park: A Unique Addition to the City's Park System." *The Western Pennsylvania Historical Magazine*, Vol. 68, No. 3, July 1985.

a two-million-dollar endowment to maintain the park. There is some controversy as to whether Henry Clay Frick actually intended to leave a legacy of an undeveloped wildlife park. Despite the contemporary musings about intent of the donor, the Frick Park Committee, Frick Foundation representatives and others made a decision soon after his death in December of 1919 to keep the park primarily undeveloped and naturally wooded.

By 1929, the original 150 acres had more than doubled to 370 acres with the careful use of the two-million-dollar endowment. It is interesting to note that at this time the Citizens' Committee on the City Plan, informed by the new progressive parks movement, was formed. The committee advocated a highly programmed and designed park environment, not considering the idea that parkland could be valuable as a nature preserve. This set the stage for a public discussion. Ultimately public opinion favored the plan to leave the park undeveloped.

"In 1939, the Frick Foundation purchased the adjacent Pittsburgh Country Club Property, adding ninety acres to the park area. [The foundation] promptly demolished the club house and regraded the tees and the traps to return the site to its natural state."³ At the same time, the Frick Park Nature Center was recognized nationally for its outstanding nature education programs.

In 1947, William Black undertook a rigorous study of Frick Park as part of his Ph.D. thesis at the University of Pittsburgh. Let's consider his description of the park:

Frick Park is an area of some four hundred and seventy six acres, consists of three wooded, modified ravines, lowland and upland field in varying stages of scrub and second growth (it had been logged previously). It represents an area approaching climax conditions, but the destruction brought about by man maintains this area in disclimax condition. There are no automobile roads running through the park. About ten miles of hard-surfaced foot trails provide the only convenient access into the area.

In the 1940s, Frick Park survived an extensive program to "manage" stormwater (by removing flow from the valley's streams, and dropping the watertable in such a way that it damaged trees).⁴

In the 1960s, Mr. Childs Frick, son of Henry Clay, donated money for the construction of the new nature center. Helen Frick was influential in seeing it designed and contoured in relation to the landscape. The nature center opened in 1979.

Today, Frick Park remains a relatively undeveloped urban park. The Nature Center is the primary architectural facility in the park, providing an interface for education and nature interpretation. It is still the site of innovative environmental education, with important work being done on the nature trails adjacent to this facility. There is some interest today in restoring the architectural entries and attendant fountains that were part of the original design. There is also some serious discussion of how to best manage the new generation of park users on mountain bikes.

It is important to note that in many ways the Frick donation of land and accompanying endowment provided the method to sustain the ideals of this park through numerous changes in politics, culture, economics, and management approaches. The "stewardship" of this park was insured by a monetary investment in the park's design and intent.

Schenley Park — municipal garden, historic civic park or a maintenance



Frick Park

Progressive (or Reform) Parks

Movement: An approach to parks that favored an organized park with numerous facilities, play directors and efficiency minded experts in recreation who could provide the masses with a structured recreational pursuit.

"I started walking through Frick Park and venturing at times into the slag site as long ago as — fifty years. I bird watch, and botanize down there, think it is beautiful in a stark and amazing kind of way."

—Jack Solomon

³ Ibid.

⁴ Black, W.L., 1947. "The Ecology of a City Park, Frick Park, Pittsburgh, Pennsylvania." Ph.D. dissertation, University of Pittsburgh.

nightmare?

It is a traditional urban park with manicured landscapes, municipal amenities, memorials, and formal gardens. Schenley Park is a major transportation and cultural hub. At the same time, the rolling landscape and Panther Hollow Ravine provide respite, and broad lawns provide space for a variety of passive and active recreational pursuits. Schenley Park is the site of eight or more memorials, a golf course, a skating rink, a swimming pool, a lake and some of the most spectacular views in the city. Phipps Conservatory provides an added benefit.

Schenley Park was a major park acquisition donated to the city in 1889 by Mary E. Schenley, actively lobbied by the visionary director of Pittsburgh Public Works, Edward M. Bigelow. (A city attempt to purchase this land with a bond issue had been struck down earlier.)⁵

The idea for Schenley Park emerged from arcadian traditions and the urban park ideas being developed at the time by Frederick Law Olmsted, an inspiration for Bigelow. Olmsted and other influential designers envisioned an alternative to the formal gardens of Europe—informal picturesque landscapes based on pastoral images. They provided a synthesis of natural serenity and human order with an occasional glimpse of natural wonder (e.g., Panther Hollow). At the same time the “City Beautiful Movement” was emerging (and Olmsted is again involved), and Oakland was increasingly developing as a center of Pittsburgh civic culture.

Bigelow assembled the land and set the program, designing the roadways and regrading for the development of the park. In 1896, William Falconer⁶ was brought to Pittsburgh from New York by Bigelow to be the superintendent of Schenley Park. A Scottish botanist “trained at the British Royal Gardens at Kew,” Falconer arrived to preside over the final regrading and to plant and landscape the park. “He laid out plantings according to the Kew system, which was the sequence of plant families to be found in the sixth edition of *Gray’s Manual of Botany*.”⁷ This manual taught a method of planting that would educate the viewer by a careful planting and layout of the perennial beds according to families. Falconer was also instrumental in developing the program and diverse collection of the Phipps Conservatory. Working with Henry Phipps, he traveled to the Caribbean and Central America to “observe how they grew so that the appearance of nature could be duplicated in Schenley Park.”⁸ Falconer and Bigelow would not be able to fully realize their nature ideals due to political shifts. The ideas and concepts that they initially laid out have perpetuated in some form to this day.

Schenley Park with all its infrastructure is both a show piece and burden. The shifts in society, culture, and ideas about park uses have not been kind over time. It is currently in need of serious attention. The damaged bridge (currently slated for repair) at Panther Hollow is one of the most visible examples. In many ways Schenley Park still functions as a classic urban park, being used for celebrations, road races, and events. The Phipps Conservatory has recently been privatized illustrating the current economic realities, and exploring new methods to restore the grandeur of the Beaux Arts influence. This private approach to our public realm deserves careful consideration, as we consider the sustainability of parks for the future.

The Hazelwood Greenway — a passive urban wilderness

City Beautiful Movement: Informed by classical sources and the Ecole des Beaux Arts in France. The City Beautiful aesthetic featured an expanded sense of the civic realm, broad panoramic public spaces, ornate gardens and buildings, a sense of conspicuous wealth and well being. A landscape in which the citizenry could see and be seen in.



Phipps Conservatory

⁵ Stewart, H., 1943. “Historical data on Pittsburgh Public Parks”

⁶ Hannegan, B., 1996. “William Falconer and the Landscaping of Schenley Park,” *Carnegie Magazine*, May/June 1996.

⁷ Ibid.

⁸ Ibid.

The Hazelwood Greenway is a 70-acre system of steep slopes and wooded under-mined vacant land. It is one of the larger of Pittsburgh's officially recognized greenways. In 1979, the city established a Greenway Program designed to consolidate publicly-owned vacant wooded, steep slope and environmentally sensitive land into continuous belts of natural space for passive use. For example, the Hazelwood Greenway provides a natural wooded extension behind the Bud Hammer Playground in Greenfield.

The Pittsburgh Greenway Program provides another model for us to consider as we think through the idea of sustainable open space. The program is designed and developed to rely on community interest and stewardship. When the program was designed and throughout the '80s, community planners in the Planning Department encouraged and helped neighborhoods develop and maintain greenways. All of those positions were eliminated by layoffs in 1990. Each community of stewards in the Pittsburgh Greenway Program has been affected in different ways. The Hazelwood Greenway has been badly impacted and is in need of critical maintenance. The Seldom Seen Greenway, on the other hand, still flourishes under an active community of stewards.

Koenig Fields — active, athletic fields

Koenig Field in Edgewood is another park we need to consider. Dedicated to active, organized recreation, Koenig Fields is a highly organized landscape serving the local sporting community. It includes tennis courts and a large field for soccer and football.

What is the current status of parks in Pittsburgh?

by Joan Blaustein, Department of City Planning

Pittsburgh has begun a venture to reexamine the parks and open space systems in the city — everything from large, regional parks to neighborhood parklets and greenways. When much of our park system was created at the turn of the century, Pittsburgh had a population of 500,000 people and an expanding economy. Now, with a significantly smaller population, with very different needs than at the turn of the century, we require a different approach to parks. We need a system that:

- can effectively maintain our parks and open spaces
- meets the needs of an aging population, distressed and underserved neighborhoods
- helps to attract and retain young people to Pittsburgh
- supports economic development

Two major efforts are underway in the city to look at these issues and propose some solutions.

Strategic Parks Planning Initiative

In late 1995, a group of public, private, and non-profit organizations came together to discuss the potential for Pittsburgh's parks system and the need for more strategic planning for parks and open space. From these discussions, the need for a more formal process became apparent, and the Strategic Parks Planning Initiative was formed. First, national and local research was conducted and a variety of events with diverse park users and stakeholders were held in order to enhance the information gathered through research. Four focus areas emerged from this process: administration, resources, physical improvements and marketing. A Vision Paper outlining these areas, and the goals and



Hazelwood Greenway

"I wish we could learn to look at this differently, and learn to take advantage of the existing topography."

—Ken Kotovsky



Koenig Fields

"Pittsburgh is a study of disconnection from the riverside. We have always had problems with access to the river. People drive many miles to go to Ohio pyle when we have this resource here...it could be spectacular here if its done right."
—Ken Kotovsky

strategies associated with them, is being developed. This Vision Paper will be used to define potential demonstration projects, build a broader constituency, market concepts to a wider audience, and prepare a funding proposal to national foundations. The Strategic Parks Planning Initiative will work with the city of Pittsburgh to refine the recommendations related to administrative challenges.

For more information contact Caryn Ernst, at the Community Design Center: 391-4144.

Regional Parks Planning



Mellon Park

"There are not many streams through urban communities. There are not many times that Mother Nature gives us a second chance. Should this greenway stand as shining way to reclaim a brownfield...Is this to be a greenway or a development with a bit of green? What are the economics involved?"
—Jerry Kruth

The city of Pittsburgh is about to undertake a Master Planning process for its four regional parks — complete plans for Frick, Riverview, and Highland, and update and finalize the 1991 Master Plan for Schenley Park. The purpose of the plans will be to guide the city's decisions on programming, the provision or elimination of facilities, and maintenance. These Master Plans will also serve as the basis for soliciting and guiding public and private investments in these regional-serving parks. The plans will include: park background, description, inventory of facilities, inventory of programs, needs/issues analysis, alternatives to address needs/issues, revenue and funding sources, recommendations with phased implementation plan. The Pittsburgh Parks Conservancy is being organized as a non-profit group to advocate for the parks.

For more information contact Joan Blaustein at the Department of City Planning: 255-2206 or Meg Cheever of the Pittsburgh Parks Conservancy: 383-7158.

In the previous section we considered the four basic types of

III. Theoretical Models for Greenways

Pittsburgh parks: 1) an undeveloped arcadian woods; 2) a beaux arts park with carefully designed plantings and numerous civic structures; 3) a greenway, community designated undevelopable open space; and 4) an organized recreational field, designed and dedicated to athletics. In the following paragraphs, we will outline the ideas which are informing current urban park planning. This may help broaden our thinking about sustainable open space at Nine Mile Run.

I like parks and nature but am not sure of this greenway approach. What exactly does it mean?

Excerpts from an article by Jack Ahern, "Greenways as a Planning Strategy." Originally published in the journal, Landscape and Urban Planning #33, 1995.

Greenways are networks of land containing linear elements that are planned, designed, and managed for multiple purposes including ecological, recreational, cultural, aesthetic, and other purposes compatible with the concept of sustainable land use. The definition and the following five key ideas provide a view of greenways as a complex and variable strategic approach to landscape planning. Perhaps greenways are appealing and successful because of the simplicity of the concept and because greenways do not attempt to transform or control the entire landscape — but by focusing on riparian corridors, and other environmentally sensitive areas, greenways are more modest in their ambitions, while exploiting linear elements in a strategic and synergistic manner. There are five key ideas connected to this definition:

1. The spatial configuration is primarily linear.
2. Linkage is a key characteristic defining the greenway and relating to landscape context. As integrated systems, greenways attempt to realize a synergy based on these spatial linkages.
3. Greenways are multi-functional, because of this, setting goals is an essential process of greenway planning. Identify the ecological, cultural, social, and aesthetic goals for each site. Some of these may be in conflict and compromise and trade-off will occur.
4. Greenways are based on an assumed complimentary between nature protection and economic development. They are a key component and paradigm for land use relationships in sustainable development.
5. Greenways should be considered a compliment to comprehensive landscape planning. Efforts should be made to protect other important landscapes that are not linear in form and which may not benefit from linkages or multiple use.

Are greenways a new idea?

by Ken Tamminga, Department of Landscape Architecture, Pennsylvania State University

Pittsburgh was not isolated from larger parks and open space trends in the late 1800s and early 1900s. For example, the birth of Schenley Park in 1889 was quite consistent with park-making across the country. Its curving carriage ways, extensive plantings and sculptures were clearly inspired by Central Park and the like. However, Pittsburgh was apparently not attracted to the more systematic thinking that created

Greenway linkage: Would indicate the ecosystem potential to extract benefit from greenways in an urban landscape. There is potential to realize both human and biological benefits from an awareness of the connections between green areas.

*"Maybe this whole process has to deal with how everyone perceives a park."
—Unidentified*

"I grew up in Minneapolis and the river way, the waterway, is the whole guiding principle of the park system there. I had always thought of the slag heaps as an extension of Frick Park."
—Dean Benjamin

"Providing access to the stream is a chicken and the egg question. Do you provide access now or wait till it is cleaned up? Of course if people don't spend time there and learn to care....It may be another 90 years!"
—Dean Benjamin

"It seems to me that the housing and culverting issues should be looked at in a different way....If it were on a stream, there were some nice rocks along the stream and it opened up on a big river, maybe there could be a marina back there, with boats tied up...waterfront that opens up to a big waterfront, sounds like a winner to me"
—Ken Kotovsky

"I find it hard to imagine Nine Mile run without being able to walk alongside it. If you cover the stream, it is not Nine Mile Run. The unique thing about it is that it is a corridor. You can bridge it, you can put roads through it, but it needs to remain a corridor."
—Jon Smith

green networks in cities such as Boston and Minneapolis. Perhaps because of the wall of industry along its riverbanks, or the discreet hills and forgotten ravines, Pittsburgh's parks were content as islands in a sea of neighborhoods. Even Frederick Law Olmsted, Jr., as a consultant to Mayor Guthrie's Civic Commission in 1909, could not convince Pittsburghers of the merit of linear park connections. Following is a list of historic events that help set the context for discussing modern greenways in Pittsburgh.

1865: Frederick Law Olmsted, Sr. and Calvert Vaux conceived the two basic greenway components—the stream valley park and the pleasure drive—in an 1865 plan for Berkeley, California.

1866: Olmsted and Vaux plan Brooklyn's Prospect Park, complete with greenway-like links and corridors.

1869: Olmsted and Vaux prepare the General Plan for Riverside (Chicago), complete with prototypical greenway-like open space winding along the Des Plaines River.

1876: Olmsted, Sr. developed Boston's "emerald necklace," entailing a linked system along the Muddy River, Charles River, boulevards and parks that encircled half the Boston urban area.

1883: Horace Cleveland designed a linear open space system for Minneapolis, organized around natural hydrological systems (rivers, streams and lakes).

1883: George Kessler designed a similar system for Kansas City, with a focus on the river terraces of the Missouri River and its tributaries.

1890: Charles Eliot convenes a conference on the new idea of "metropolitan parks" in the Boston-Cambridge region, which led to the founding of the Metropolitan Parks Commission.

1898: Ebenezer Howard proposes the concept of urban greenbelts in "Tomorrow: a Peaceful Path to Real Reform." Howard's work led to the idea of the Garden City.

1902: Frederick Law Olmsted, Jr. (Olmsted, Sr.'s nephew) contributed to the Senate Parks Commission's plan for updating L'Enfant's 1791 plan for Washington, D.C.; it included designation of green parkways along Rock Creek, the Potomac, and a number of lesser waterways.

1915: Olmsted, Jr. and W.A. Stinchcomb prepared a plan for the city of Cleveland (also called the "emerald necklace") targeted at ridges and ravines; the Cleveland regional system now encompasses 18,000 acres and is 85 miles in length.

If there was so much interest in greenways at the beginning of the century, why does it seem they are a new idea?

Urban greenway planning experienced a near demise in the early decades of this century because of new aesthetic ideals and larger social dynamics. The 1893 World Columbian Exposition in Chicago marked the beginning of the City Beautiful Movement. Classic architecture experienced a great revival, as evidenced by some of Pittsburgh's most notable buildings, many of them scattered throughout Oakland. This preoccupation with built form did little to bolster sagging public interest in greenways and natural open spaces.

The 1910s and '20s saw a shift in priorities once again, this time to public health and city infrastructure. Romantic views of nature gave way to early Modernist perspectives that sought to control and harness natural processes. Huge engineering works ensued. Stream

culvertization, river-filling and new sewage-transport systems bore witness to this so-called City Efficient era. Most of Pittsburgh's streams were buried or channelized during this period, including the upper reaches of Nine Mile Run.

Meanwhile, the rise of the automobile allowed for the consumption of "pristine" nature beyond the urban fringe. In wilderness areas the growing National Park Movement continued to adopt and refine greenway principles. Newly conceived linear motor parks, including the Blue Ridge Parkway, also borrowed greenway concepts from an earlier era. Still, most designers and planners practiced their craft where they could—in and around cities where suburbs, shopping malls and estates squandered their creative energies.

It was the environmental movement of the 1960s that stimulated a gradual reawakening of the greenway movement. Writers such as Rachel Carson, Barry Commoner and Jane Jacobs advocated a post-industrial view of nature in the city. In terms of application, landscape architects again translated theory into new greenway forms, with seminal works by Phil Lewis (*Wisconsin Outdoor Recreation Plan*, early 1960s), Ian McHarg (*Design with Nature*, 1969), Michael Hough (*The Urban Landscape*, 1971) and a few others.

This time around, however, greenway planners began to tap into science as a means of adding substance to the greenway cause. The late '70s and early '80s witnessed a remarkable outgrowth of basic ecology and biology into several proactive applied ecologies. Landscape ecology helped establish greenways as a vital part of the urban regional mosaic, an antidote to increasing ecological fragmentation. Restoration ecology provided the tools to reconstruct some semblance of natural function on degraded sites. And conservation biology studied the habitat requirements of indigenous species, calling for large, connected natural areas and corridors as a means to achieving the genetic flow needed for diverse and healthy populations.

These applied ecologies have recently begun to merge, and are providing an ever stronger foundation for the modern greenways movement. Uncharacteristic of many sciences, they perceived the role of social values and cultural norms. They have helped to popularize and make relevant such concepts as "biodiversity" and "ecological integrity." Difficult to quantify, these ideas nevertheless are being shown as essential characteristics of a healthy urban region. Ecologists have learned to work alongside designers and community groups. Today, greenway planning is an art, a science and, at its best, a deeply community-based process.

Connected natural systems are becoming the hallmark of livable cities. Portland's Greenspaces, Toronto's Bioregional Greenway Network and Chattanooga's Riverpark are just some examples of new and widely valued initiatives that grew from collaborative involvement between designers/ecologists, local citizens and supportive local and state governments. As the 21st century confronts Pittsburgh, this three way partnership approach could provide the impetus for another, greener Renaissance.

Pittsburgh's history has provided us with a legacy of large, gracious parks. But they are isolated from each other and the rivers and hillsides that are the ecological lifeblood of the region. Clearly, Nine Mile Run presents a prime opportunity to create an ecological greenway link between Frick Park and the Monongahela River. And in time, it may

Ecology: The branch of biology dealing with the relationships between organisms and their environment.

Conservation biology: The identification of threatened and endangered species and their related ecosystems with the intention of preventing further loss or threats to those species.

Ecosystems: The system formed by the interaction between a community of organisms with their environment.

become a showcase of the new ethic, one that values fresh water, clean soil, and thriving wildlife enough to act.

What does ecology have to do with the planning and management of parks?

Ecosystems planning assumes that society and nature are interconnected. Here in Pittsburgh our industrial legacy has fragmented that relationship. As we consider redevelopment of our post-industrial brownfield sites, we have an opportunity to make reparation and ensure that new open spaces enhance natural processes. To do that, we have to carefully consider the complexity of the existing natural environment (and its degradation due to human activities) and begin to value and support the ecology which defines this city of rivers.

Ecological design⁹ is based on ideas about structure and function in the context of physical location. When we talk about structure, think about the things we see in nature: rocks, soils, plants, and trees, wildlife and birds. These can be further broken down into: rocks and soils, (the abiotic components), green plants which store the energy from the sun, and animals which consume plants and other animals (the producers), and microorganisms: barely visible creatures that live in the soil and help decompose decaying plant and vegetable matter and in the process create soil (the decomposers). Each of these structural groups interacts in a variety of ways, some of the interactions are obligate, or determined by the relationship of one life form to another. All of the life forms are tied in some way to a complex web. One of the ecological definitions of sustainability is oriented on diversity. The more complex the web, the less likely it is to be seriously damaged by natural and human catastrophes.

Function refers to the flow of energy and materials in the landscape. The relationship between the two primary sources of energy, the sun and water, is manifest in the green plants. The green plants nurture the animals, plants and animals eventually return to the soil to create the conditions which nurture new growth. This is all based on two physical laws. The first law of thermodynamics, energy is neither created or destroyed, although it may be transformed. (From the biological point of view, food is considered energy.) The second law of thermodynamics is that as food/energy is used, it is degraded into a more dispersed form. Think of the energy of the sun, distributed to the multiple plants which are then consumed by the animals which eventually die and the nutrients are utilized by microorganisms in the soil.

The other important element of ecological design is the location. Structure and function are determined by location. Plants and animals evolve out of a relationship to landforms, and climates. Combinations of temperature, moisture and surface form effect the geology, soils and communities of plants and animals. "Each species has a limiting condition that depends on temperature and moisture, but they also depend on the presence of the other organisms with similar environmental needs." Thus, every place is unique in complex interrelationships or systems of ecology. The structure and functions of landscapes in relation to flowing water are especially complex and exciting to consider.

Humans have an enormous affect on the function of ecosystems. Any manmade landscape from the slag heaps to a rigorously "gardened" city park is most likely ecologically degraded to the point of

Obligate: Creatures, or plants that are uniquely suited to a specific environment, and cannot exist without the physical conditions of that environment.

Abiotic: The absence of life, i.e., minerals, rocks, stones etc.

Thermodynamics: Using or producing heat.

⁹ Lyle, J.T., 1985, "Design for Human Ecosystems, Landscape, Land Use and Natural Resources." Van Nostrand Reinhold, New York.

ecosystem collapse. In the attempt to grow exotics, and create visually appealing landscapes based on formal design traditions, we apply a variety of aggressive management techniques from pruning to mowing, raking, and the application of pesticides and fertilizers which have a detrimental effect on the food chain of producers. Butterflies are a good example. They rely on specific plants for larval food and a general assortment for nectar. They are particularly susceptible to pesticides. As we mow the grass and rake the leaves we are often removing the sleeping chrysalis or cocoon stage of the butterflies, insuring that the few that escape the application of pesticides will not survive.

Once we begin to understand the complex relationships of plants, animals, and human nature we can begin to design our parks to enhance the experience of nature and promote the development of a sustainable ecosystem. We need to understand the order of three systems to design from an ecological point of view: 1) The ideal system for the region; 2) The existing system; and 3) the likely effect of our intended design. One of the hardest concepts to understand is the idea that nature is a dynamic entity. Designing with a systems ecology approach takes into account the transformation of a landscape over time (known as plant succession) and as a result tries to plan accordingly.

Applying a systems ecology approach to an urban parks program can be extremely rewarding. Aesthetic perception can be broken down into two broad categories; panoramic landscapes and immersive landscapes. "Panoramic landscapes emphasize physical distance and is a primarily visual experience that involves a sense of separation between viewer and landscape."¹⁰ An immersive landscape emphasizes relationships and proximity. The experience is multi-sensual involving a sense of continuity between the viewer and the landscape and its intermediary wildlife. It could be argued that the immersive landscape experience is one of the experiential goals for applied ecosystems planning of an urban park system.

Ecosystem collapse: When the environment supporting the interactions of organisms ceases to exist or function properly.

Exotics: Plant materials that are brought in from outside the bio-region, defined as the immediate geographical area of similar climate, soils, landscape and flora and fauna.

Dynamic entity: Something which has motion, force or cyclic action, in the process of change.

Immersive: To plunge into or involve deeply. To experience with multiple senses and the intellect at the same time.

¹⁰ Berlant, A., 1996. "Aesthetic Perception in environmental design." published in *Environmental Aesthetics*, edited by Nasar, J. L., Cambridge University Press. 1988



IV. Citizenship and Stewardship

Brownfields: Abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

"The natural green areas are a very attractive amenity, or a good selling point to incoming residents to the area. Right now, Nine Mile Run is agreeably not the most pristine place on the planet, but it has potential to be cleaned up. The question which remains to be answered is where will the money come from."

—Mark Remcheck

"The Seldom Seen Greenway for instance, very little has been done with it. Now, it wasn't as severe. But it did have some major things happening there, but they just let it grow. It is fairly recent according to the history we are hearing now that this has been left. Just let it go, is an option that has to be put in there for analysis."

—David Tessitor

"It would be nice to see something green there. I don't actually see the slag heap. But if I walk down the road, it does not really look that bad to me. A lot of areas in this world have rocky formations, whatever, it really does not look that ugly. I see some gain that we have some park land or whatever but not so much that it outweighs other things like an immense increase in traffic."

—Gundi Caginalp

Is the Pittsburgh Greenway Program a model for the Nine Mile Run Greenway?

The goals of Pittsburgh's Greenway Program, as set forth in the 1970s, still resonate today. The goals are:

- to appreciate the natural environment that surrounds us;
- to capture and preserve the steep wooded hillsides and make them part of our lives; and
- to leave a legacy for future generations by formal adoption.

The most interesting aspect of this program is that it relies on neighborhood participation to define the scope and boundaries of the greenway. Furthermore, it involves specific community groups in the care of these urban open spaces. Before the city will place property into the greenway system, a community organization must approve a resolution defining neighborhood commitments on such items as: project planning, assistance in soliciting private property gifts, clean-up help, community education, and area monitoring. The neighborhood submits that resolution to the city which then takes action on the proposed greenway.

The first greenway, Spring Hill/Spring Garden, was adopted in 1980; the last, Elliot and Shoreham, were adopted in 1989. Due in large part to the layoffs of community planners in 1990, no new greenway designations have occurred. Community planners were assigned to interact with community organizations and citizens in geographic areas. They were able to establish the relationships necessary to develop a greenway. After the eight-year period of inactivity, three neighborhoods are seeking to establish officially recognized greenways: Fineview, Sheridan, and South Oakland. These are likely to occur in 1998. Obviously, the spirit of the City Greenway Program is strong.

The land that is likely to be considered for the greenway program is "left-over," coal mine riddled, historically ignored valleys, and steep slopes. The "left-over" categorization applies equally well to post-industrial brownfields as exemplified by Nine Mile Run. How do you elevate the public perception of a place known as a dump or a wasteland? How do you manage the transition of left-over land into places of complex experience, value, and interest to the community?

The Nine Mile Run Greenway Project is modeling one potential process.

How is the City Greenway Program funded?

It is the responsibility of the community organization to fund greenway maintenance. In the past, the Greenway Program received funding from the city through a contract with Neighborfair Pittsburgh (now CitySource Associates). These funds were used for initial debris removal and fence installation at new greenway areas. The fences act as barriers to prevent illegal dumping. Each greenway includes signs to recognize the greenway as a visible community asset.

After this initial investment, the responsibility to maintain the greenway is as defined in the community resolution. In Beechview, the Friends of the Green and the Seldom Seen Greenway organize biannual clean-ups and hikes through the greenway. For those greenways, without such strong community buy-in, illegal dumping and neglect would degrade the greenway experience.

So, what are the specific issues affecting a Nine Mile Run Greenway?

- Should it be a greenway or a park?
- Water issues: how to resolve 100 years of municipal pollution.
- Slope, grading, steepness, and revegetation.
- Use options: park, greenway, playing fields, the complex experience of a post-industrial river valley or the artifice of a pastoral landscape created by filling what is left of the valley. (There are good arguments on both sides of the question.)
- Interface with the built environment: the relationship between the existing communities and the new housing, the relationship between the greenway/park and these communities.

How can citizens stay involved in the Nine Mile Run Greenway planning process?

The Department of Conservation and Natural Resources has provided the city of Pittsburgh with a grant to develop a strategy for restoring, maintaining or enhancing Nine Mile Run through the formulation of a reciprocal citizen <--> professional, community-based planning process. The Department of City Planning is managing the river conservation process. The STUDIO has worked to assemble a team of academics from three institutions to gather data and create the public program.

The planning process:

1. A review of all *Ample Opportunity: A Community Dialogue* materials.
2. Presentations to any community group that calls and requests it.
3. Continued staffing of the community resource center on weekends. (Saturday, 9 a.m.-1 p.m. and Sunday 12-4 p.m.)
4. The creation of a community advisory board. Stakeholder organizations should appoint a representative, individuals should call to be sure their point of view is represented.
5. Two or more public meetings are planned:
 - (a) to present and solicit input to the Draft Conservation Plan.
 - (b) to present the Final Plan and include final public comment.

For more information contact: Tim Collins or John Stephen at the STUDIO: 268-3673.

"The questions is, what is the greenway? I would take it on faith, but I don't hear that around the room. I am hearing so much unwillingness to take things on trust and so much dispute about what the 'it' is, that it undermines the public support we need."

—Jonathon Robison

"In the case of Nine Mile Run it seems the municipalities show no concern for sewers beyond their borders."

—Doug Chaffey