

BUILDING SUSTAINABLE FORESTRY LINKAGES BETWEEN
URBAN AND RURAL COMMUNITIES
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Through two pilot projects, one in Baltimore, Maryland and the other Seattle, Washington, the Urban / Rural Initiative at American Forests seeks to learn and demonstrate how metropolitan regions can restore and maintain the critical ecological services provided to them by forests within their borders and in the surrounding rural areas. In order to be effective, such projects need to transcend political and social boundaries and be rooted in communities working together. The pilot projects are placing a strong emphasis on helping underserved urban communities restore their forests suffering from economic disinvestment and a declining tax base, as well as helping rural communities on the edge of metropolitan areas facing rising land values for suburban development and the destruction or fragmentation of existing forests. While strategies and solutions may be many, partners involved with this initiative have focused on building educational, economic, and political connections to establish sustainability across political boundaries.

Through this report, we will explain why urban / rural community interactions are so critical to sustainable cities, describe the actions we are taking in our initial demonstration projects, and provide recommendations from lessons learned and critical barriers that have been overcome in order to provide a practical framework from which future urban / rural projects may emerge.

Framing the Urban-Rural Initiative

The need for an urban-rural initiative emerged through discussions of the Communities Committee of the Seventh American Forest Congress. The Communities Committee originated in 1996 as a national network of forest practitioners, academic institutions, and policy organizations seeking to heighten awareness of the interdependence between healthy forests and healthy communities. Members of the Communities Committee, who were primarily dealing with issues related to rural forest-dependent communities, saw a need to build relationships with community forestry practitioners from urban areas and to explore the interactions and prospects for mutual support among urban and rural communities. As a member of the Communities Committee, American Forests had a particular interest in urban-rural linkages and offered

¹ The urban-rural initiative discussed in this report was developed with support from the National Urban and Community Forestry Advisory Council, the Communities Committee of the Seventh American Forest Congress, and sponsors of American Forests' Global ReLeaf program.

to facilitate an urban-rural initiative. A task group was formed in 1997 that identified a set of principles to help guide the initiative. These five principles are:

1. Promote dialogue between urban and rural community groups to build mutual understanding and identify common environmental, social, and economic issues/objectives.
2. Identify and apply assessment, planning, and monitoring tools to explore environmental, social, and economic linkages between urban and rural communities.
3. Encourage educational initiatives to share information and perspectives, and to build common understanding of evolving urban and rural contexts.
4. Develop partnerships between urban and rural community groups to share information, expertise, and skills to participate in natural resource planning and decision-making and to implement projects.
5. Identify mechanisms and implement pilot projects through which urban and rural community groups can work together--and with federal, state, and local agencies--to demonstrate innovative approaches to ecosystem restoration and maintenance.

Understanding Urban / Rural Concepts

With these guiding principles, American Forests began exploring interest in urban-rural concepts and activities with an array of public and private entities in two pilot regions: the Puget Sound and Chesapeake Bay. We also prepared papers and gave presentations to build understanding of what we were learning through these discussions and to further clarify our understanding of urban-rural concepts (references listed at end of report). Through a literature review, we found that urban and rural interactions have long been a topic of interest in economic development studies, where they are seen as central to processes of social, economic, and environmental change in countries around the world. The focus on urban and rural interactions has increased in recent years -- both globally and domestically -- as population growth, development patterns, and impacts on the environment have become greater public concerns. Yet, despite increasing interest, studies of the interactions between urban and rural areas have had limited impact on development policies and practice¹.

The topic “urban-rural linkages” itself implies a simple dichotomy between urban and rural. Generally, empirical studies have made a *spatial boundary* distinction between urban and rural areas based on census data, such as population or residences. They have also made a *sectoral* distinction by characterizing urban areas as industrial and service oriented, and rural areas as agricultural or natural resource-based economies. In reality, spatial boundaries are blurred by dynamic growth and flows of people, and sectoral distinctions are changing, as rural areas develop more service oriented economic activities and urban areas develop more focus on natural resource based concerns.

Many of the most intense issues and interactions between urban and rural areas occur in the areas immediately surrounding the built-up parts of cities or towns. This *peri-urban area*, generally just beyond the urban boundary, is often still designated as rural, but real estate development and increasing land values are driving rapid change. This is the area most closely associated with urban sprawl in the U.S. It is also the area in which the ecological impacts of growth are most clear as rural farms and forests are

converted to other land usesⁱⁱ.

The rural areas that provide ecological services to urban areas are generally not recognized and accounted for in policies and market transactions between urban and rural areas. However, some urban and rural areas are beginning to explore these critical ecological linkages together. Two examples are New York City's agreement with rural communities in the Catskills to maintain the quality of the City's drinking water suppliesⁱⁱⁱ and Seattle's efforts to work with counties and rural communities to restore and maintain critical habitat for salmon species recently listed as endangered.

One conceptual approach to thinking about the ecological linkages between urban and rural areas is the "ecological footprint" of urban centers.^{iv} A city's ecological footprint is the land area necessary to meet the needs of its residents and businesses for food, other renewable resources, and even the absorption of carbon dioxide to compensate for emissions from fossil fuel use. Generally this land area is several times the city's size and can vary significantly based on wealth, consumption, and energy-use in a city. For cities in non-industrialized countries, resources are generally drawn from close by, while in the U.S. and other industrialized countries, resources may be drawn from distant places around the globe. Even within that ever increasing global context of goods and services transfer, critical ecological services to urban centers such as clean water, clean air, and wildlife habitat *must* come from healthy, functioning ecosystems in both nearby rural areas and within the urban areas, and therefore must be maintained by the communities that live within those ecosystems.

Two broad principles from the President's Council on Sustainable Development were particularly helpful as underlying concepts for bridging urban / rural concepts to action.^v They connected well with the values and principles discussed by members of the Communities Committee. These principles are:

1. Communities are a key to sustainable development.
2. Communities cannot be sustainable in and of themselves; they must work together on issues that transcend their political boundaries within a region.

Our urban-rural initiative sought to build on these broader concepts but to be guided by the common understanding and shared objectives of our local partners as we developed pilot projects.

Turning a Vision into Action

American Forests took these urban-rural concepts and principles to potential local partners in two metropolitan areas – Baltimore, Maryland and Seattle, Washington -- that had very different social, political, and environmental contexts. But in spite of these different contexts, partners in both regions helped us build pilots based on the same basic activities designed to empower communities to restore and maintain ecological services without relying on heavy government regulations or land protections. Activities have therefore focused on developing 1) a conservation-educated public that understands the critical ecological relationship between urban centers and the forests within and surrounding those centers and 2) regional community-based natural resource economies that use the marketplace to foster stewardship for the land while enhancing economic stability for its residents. Goods and services within this economy include, but are

certainly not limited to, value-added recycled urban wood products, sustainably harvested rural wood products, and certified urban ecosystem restoration work.

Working with two cities such as Seattle and Baltimore has given this initiative grounding in a very wide spectrum of issues facing metropolitan centers. Baltimore is a post-industrial city facing decaying inner-city neighborhoods with a declining population currently about half the size it once was. In Seattle, the economic boom to the region over the past decade has spurred development that has fragmented and destroyed many of the rural forests that define the region. The biggest difference between the two pilots has been the interpretation of urban - rural within each region's unique context. In Seattle, a literal geographic connection emerged immediately due to the impending need to protect rural and suburban forests from eastward development along I-90. In Baltimore, geographic connections along and across watersheds were critical to policymakers, but local community groups with whom we dealt in the city wanted to focus initially on critical issues facing underserved inner-city neighborhoods. These issues included vacant land problems, quality job opportunities, local business development, soil contamination, and in-fill development threatening open space in their urban communities. We therefore brought rural philosophies and practices such as forest restoration and wood products manufacturing to serve inner-city neighborhoods' immediate needs with the goal of working with more rural communities as capacity of local partners increased and opportunities arose.

Seattle's "Greenway Connections"

In Seattle, local nonprofit partners proved to have significant capacity, access to funding, and political strength within the region. When we first met leaders within Earth Corps (at the time King County World Conservation Corps) and the Mountains to Sound Greenway Trust, loose discussions were already happening between them as to how they could better work with the Forest Service and expand their own capacity for doing forest restoration projects in the Mountains to Sound greenway along the I-90 corridor east of Seattle. The Greenway Trust had been given significant financial resources during the 1990s to protect about 110 miles of forests and working farmland. With about 80% of their planned acquisitions complete, we came to them while they were looking toward the next step of how to best utilize the protected lands in the greenway. Earth Corps was still a relatively new non-profit service corps in Seattle at the time as well, having established their niche with international corps and professional-grade work, but looking to better reach underserved minorities and develop a more cohesive framework for their various programs.

When introduced to the urban / rural objectives, the two organizations immediately understood and adopted them as a framework from which they would expand their organizations. One key selling point was that these objectives afforded the nonprofits the opportunity to work with the Mount Baker / Snoqualmie National Forest as well as city, county, and private landowners within the greenway. For the sake of the value and public support of their urban National Forest, the Mount Baker / Snoqualmie realized both the need to reach minority populations and the opportunity this collaborative partnership presented them to do just that.

Discussions ensued and the partnership eventually formalized through a Memorandum of Understanding (MOU) and the name 'Greenway Connections'. Each of

the five groups that initially signed that MOU brought unique perspectives and resources that together created a network of regional and national organizations that could really take action: Earth Corps brought capacity to engage youth and young adults in formal work crews that implemented restoration projects within the greenway. The Mountains to Sound Greenway Trust is a regional nonprofit that had worked for a decade to protect and restore forests and green spaces along the I-90 corridor. They now sought to use the greenway as a conservation education tool and in turn to utilize corpsmembers, volunteers, and youth as a stewardship workforce for the greenway. The Mount Baker / Snoqualmie National Forest has and will continue to provide access to significant national forest land and resources to develop programs to engage underrepresented youth in outdoor education and restoration projects for young adults such as logging road obliteration and trail maintenance. The Forest Service's Pacific Northwest Research Station brought capacity to do civic science monitoring on the impacts of these educational and stewardship restoration initiatives on the larger community. Finally, American Forests as a national conservation organization, introduced the original concepts and shared lessons and projects from a network of groups working all over the country. They are now utilizing their national status to fund raise for local projects, disseminate lessons learned from the pilot to national audiences, and spearhead regional policy initiatives.

What has emerged from Greenway Connections is a linear model reaching youth as young as six to adults through education and training programs that build a "supply of skilled labor". Designed to reach a large number of youth and provide a clear pathway if they choose from broad hands-on education to marketable skills, each progression becomes more technical and focuses on fewer individuals. While a number of programs seek to build this escalating stewardship model, this initiative is unique in that it 'cascades leadership' from one age group to the age group directly below it. This is proving to be a great way to build a sense of community responsibility for the land as well as keeping people from becoming self-absorbing sponges of information for only their own benefit.

For example, Earth Corps' Greenway Crew, comprised primarily of underserved and homeless teenagers, is working with Seattle's Dearborn Elementary School students to build a garden and wetland on their forested property and to do restoration projects in a soon-to-be-developed Children's Forest in Mount Baker / Snoqualmie. Similar projects with middle schools will guide youth into Earth Corps' Greenway Crew and graduates of the Greenway Crew can continue their restoration skill-building by joining Earth Corps' young adult apprenticeship program, called Outreach and Restoration Community Apprenticeship (O.R.C.A.). Apprentices can take two tracks. They can learn project and volunteer management skills by 'cascading leadership' to area high school students engaged in a 4-H stewardship program where students get paid \$100 a month to do two days of restoration work and come to two meetings. The other path O.R.C.A. apprentices can take is to master technical skills and become certified for ecosystem restoration employment. In order to build "market demand" for this workforce, American Forests plans to initiate fund raising efforts to increase the number of Global ReLeaf tree planting projects in the Greenway and to work with regional partners to help define apprentice certification so that they are trained for specifically urban restoration work and not forced to learn rural forestry skills that are not applicable. As new opportunities arise and the

focus extends further into rural communities, new projects will simply integrate into this cascading leadership model.

Baltimore's Urban Forest Management Initiative

In Baltimore the need identified by local partners centered much more on social and economic problems within underserved urban core neighborhoods, which impact the ecological health, as well as perception, of the entire region. This pilot project is built on a similar model as Seattle -- building labor supply and market demand for restoration and maintenance of the forests in their communities — but the initial focus is on building the capacity of inner-city groups to take action in their own community. As their capacity grows, local actions will be developed to more clearly connect with rural landscapes and communities. Key local nonprofit groups with whom we forged initial relationships were Civic Works, Baltimore's service conservation corps, and the Urban Arts Institute, a local nonprofit that combines art training with greenspace restoration. Despite their great enthusiasm for the urban-rural concepts, these partners had less capacity and access to financial resources than their counterparts in Seattle. American Forests worked extensively with these partners to develop project proposals for various public and private funding sources, through which we could initiate action. As the projects grew, these initial partners engaged with the Parks and People Foundation, the Baltimore Ecosystem Study, and the Woodberry Urban Forest Initiative.

The strategy in Baltimore is similar to Seattle, just focused on restoring the inner city. Partners seek to empower residents by developing activities that create a “supply” of trained restoration workers capable of addressing the unique forest issues that exist in Baltimore, and build “demand” for ecological restoration and maintenance work through investments by landowners, communities, and businesses in creating parks, wetlands, or other ecological enhancements on such degraded lands as contaminated industrial brownfields and vacant residential lots.

On the supply side, efforts focus on attracting, educating, and training youth and young adults from underserved neighborhoods for this restoration workforce addressing the unique forestry needs of their post-industrial city. Our partnership is developing a ‘Green Career Ladder Program’ to help elementary school through high school students experience a series of hands-on stewardship education opportunities, accomplishing important forestry work while learning. This experience will lead to higher-level opportunities through which young adults can either 1) attend college / graduate school, or 2) pursue technical careers. One option is Civic Works’ job-training program that American Forests has helped develop called B’more Green. Trainees become certified to bioremediate and restore brownfields.

On the demand side, partners are focusing on efforts to plan, invest in, and monitor urban forest restoration and maintenance activities, from tree planting to wood recycling. They are developing innovative policy initiatives through workshops, publications, and a policymaker field tour that engage landowners, communities, and government agencies in creating market incentives to increase both public and private investment in urban forestry. They are also incubating an urban wood-waste reutilization business that will seek to add value to by-products of urban forest management, create job opportunities in underserved neighborhoods, and catalyze reinvestment in restoration projects. American Forests is undertaking an important policy initiative that will build

the final piece to this puzzle, linking the wood waste reutilization with the urban restoration work with rural communities. The goal of this policy initiative is to establish a certification for certain urban wood waste, derived from trees downed by disease and age, smart growth development, or sustainable forestry on the urban / rural fringe. The goal is to add a value for urban by-products in the market and create a mechanism by which a third party government entity could contract inner city business to add value to the wood waste, with profits the government makes getting redirected into restoration projects on brownfields, vacant lots, waterways, and parks.

These projects, in addition to a nursery being developed atop a landfill that will provide a supply of native plants throughout the city, will be brought together under an urban forest management plan Revitalizing Baltimore is taking the lead in creating for the City. It will make a plan-of-action for Baltimore as one would a working rural forest, identifying where restoration and maintenance work is needed, how to create value for urban wood waste, and how to best accomplish the work.

Lessons Learned and Recommendations

The process from conceptualization to action in both Seattle and Baltimore has been neither smooth nor necessarily linear. Even with their unique focuses and political contexts, the following situations arose, sometimes unique to one pilot but often common between the two. Anyone developing similar projects should be aware of these hurdles in order to either avoid them when possible or simply account for them in timing and budgeting.

1. We tried to create an informal, open process of discussion that presents urban / rural concepts with humility and humor. These are “big vision” concepts, and they must address problems that are important to the communities that adopt them. For example, in Seattle, vacant or contaminated urban land is not nearly as significant an issue as it is in a post-industrial city such as Baltimore. Rather, Seattle faces immense growth pressures from development into its rural forests and a high-tech boom that is leaving many underserved residents behind economically.
2. We sought partners with either an existing capacity for project implementation within a larger vision, or partners who may lack immediate capacity for implementation, but have the ability to see beyond their own communities to a more regional approach to problem solving and are willing to invest resources into expanding their capacity.
3. We have tried to balance a large, ambitious urban to rural vision with tangible projects on-the-ground. Many people we spoke with were tired of meetings and talking about issues such as endangered species or water quality. When approached with a more vague urban / rural concept, they immediately wanted on-the-ground models. So, while keeping the larger vision, we are building smaller scale models that can be adjusted and allowed to grow naturally rather than trying to resolve many complex urban forestry issues from the inner city to the rural fringe in one attempt. Some people have questioned our efforts as they see only small, incremental advancements at first, but refining those details have prevented us from losing credibility by having big ideas and no means of implementing them in the foreseeable future. We discovered that this approach

left a discernable role for a national nonprofit hard to define early on as local partners scrambled to increase their capacity and develop new initiatives. Becoming almost a staff arm of local partners became the most effective role for American Forests in the Baltimore pilot's initial year. As the projects reached a critical mass of funding and partnering support, local partners have become increasingly interested in using the projects as national initiatives and utilizing the capacity of a national organization.

4. It may be quite obvious, but in urban communities more than anywhere else, forestry must extend far beyond trees to integrate critical social and economic issues. We found that economic growth, public health from contamination, open space for picnics, and in-school service learning opportunities ranked far higher on some communities' list of priorities than just trees. We have sought to use trees as a means of addressing more pressing social issues and demonstrating the benefits of trees beyond their ecological value.
5. Though enticing, partnering with every organization working on related issues in the region proved to not be a necessity. What made Civic Works a wonderful partnership in Baltimore was their willingness to collaboratively explore new projects and concepts and put whatever resources they could into making them a reality. We attempted early on to integrate with a number of local organizations, but ran into several roadblocks as some organizations proved to be too small to contribute to such a vision and others with similar visions attempted to direct our partnership to adopt their own agendas that, while certainly worthwhile, were significantly different in perspective and community impact than the urban / rural objectives as defined by the Communities Committee.
6. Underserved urban communities are often inundated by people beyond their borders coming with pie-in-the-sky resolutions to very complicated problems. We learned to be very careful in making statements of intent on which we could not follow through. Other well-intentioned initiatives in Baltimore have failed to follow this principle and almost violent tension has resulted.
7. We learned to value the strengths and account for the weaknesses of each partner. Small nonprofits might have limited capacity, but they can be very entrepreneurial and often take risks that large federal agencies, while potentially bringing significantly more capacity and resources, cannot because of heavy bureaucracy. In both Seattle and Baltimore, under very different circumstances and with different federal agencies, approximately 10 months of document wordsmithing and negotiations ensued before Federal actions could be taken.

In the Baltimore project, the EPA's bureaucracy required every aspect of the two-year initiative to be explicitly defined before money would be made accessible for job training. Certain goals of the EPA did not fit with the culture or organizational structure of Civic Works, while the capacity of Civic Works' staff already stretched thin on existing programs was repeatedly questioned by the EPA. A number of situations such as these caused significant friction throughout workplan development. As negotiations on various aspects of this workplan progressed, certain partners and opportunities left while others joined. Once the funding was made available and the project became less than just theoretical on paper, Civic Works was able to hire staff for B'more Green that were capable of

devoting their time to the program that previously had to be built by whomever could contribute in-kind time.

8. One goal of any urban / rural project should be to help agencies work better with local nonprofits and demonstrate that the local partners can be an asset rather than a burden to the goals of the agency. In Seattle, the Forest Service has recognized that our partnering nonprofits have the capacity to fulfill Forest Service needs which, far from burdening Forest Service staff, helps them accomplish their objectives. The relationship between the agency and nonprofits has become more of an internal collaboration that has streamlined both access to funding and a number of projects within and beyond this partnership agreement.
9. Learning through scientific monitoring is critical to such demonstration projects, as quantifiable results will ultimately be the deciding factor as to whether youth are adequately reached and changed. Nevertheless, this civic science monitoring is difficult to fund and even harder to measure in terms of social and economic change. We have found established researchers to take the lead on this aspect of the project, but the money has been difficult to secure.

Next Steps

Now that the initial period of conceptualization is long past and project foundations have been laid in each region, both pilots have sufficient funding, federal technical support, and community support to implement critical initial projects. As these projects develop, all partners will continue to expand the initiatives into more rural communities to reach increasing numbers of youth and adults, expanding job opportunities, job seekers, and a conservation-minded public. As new communities enter to address their own issues, this initiative will adjust. American Forests and the Communities Committee will continue to use the pilots for learning through monitoring and as national demonstrations. But no matter how these pilots grow, the ultimate goal of both will always be to build public understanding of the need for sustainable forestry across urban and rural settings, to learn and demonstrate through specific projects how to address that need, and to spur exciting new urban / rural initiatives in other metropolitan regions.

ⁱ Tacoli, C. 1998a. "Rural-urban interactions: A guide to the literature." *Environment and Urbanization*. Vol. 10. No. 1. pages 147-166

ⁱⁱ Gray, Gerald J. 1999. "Exploring Ecological Linkages Between Urban and Rural Communities". Keep America Growing Conference, Philadelphia, PA.

ⁱⁱⁱ Gray, Gerald J. 2001. "Linking Water Quality and Community Well-Being in the New York City Watershed" *Forest Communities, Community Forests*. pages 9-25.

^{iv} Rees, W. 1992. "Ecological footprints and appropriate carrying capacity: What urban economics leaves out." *Environment and Urbanization*. Vol. 4 No. 2 pages 121-130

^v Sustainable Communities Task Force Report. 1997. President's Council on Sustainable Development. Washington, DC.