



# Developing for the Future: Hometown USA



**Innovative  
Community  
Projects**  
Supported by  
EPA Grants



## DEVELOPING FOR THE FUTURE: HOMETOWN USA

### DEAR READER:

I am pleased to share this report, *Developing for the Future: Hometown USA—Innovative Community Projects Supported by EPA Grants*, because I believe in the important work communities are doing to protect local environments and the quality of life of their citizens. To successfully address pressing problems such as tailpipe exhaust and polluted stormwater runoff, communities must have the resources and capacity needed to create innovation and change. EPA is supporting communities across the country, such as those profiled here, as they demonstrate innovative approaches to environmental and public health protection—approaches that create environmental benefits and more livable communities by preserving open space, creating new transportation options, and revitalizing under-used and abandoned brownfield sites. As environmental leaders, they set examples and offer lessons learned from immediate experience that can benefit other community efforts in the future.

Americans are increasingly recognizing the effect that development patterns and decisions have on environmental quality and overall quality of life. As a result, through increased

efforts to protect open space, through record numbers of new transit projects, through expedited permitting for downtown redevelopment, communities are seeking new ways to grow. And they are succeeding—finding development strategies that serve the economy, community, and environment. EPA sees this as a positive trend and is committed to supporting livable community initiatives in as many strategic ways as possible. The Brownfields demonstration projects, Regional Geographic Initiatives, watershed protection partnerships, and many other EPA programs provide important elements of this approach. Within these pages you will find examples of our partnerships with communities specifically in support of environmental protection through livable communities initiatives.

I am proud to say that EPA grants and partnerships helped support all the community projects cited in this report. By highlighting these community accomplishments, we hope to encourage still further innovation by communities looking to preserve environmental quality and livable neighborhoods for future generations.

Sincerely,



Carol M. Browner





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The map used in the cover illustration and in selected details throughout this publication is courtesy of the AMD&ART Vintondale Project, a community effort assisted by: T. Allan Comp, Ph.D., Project Director and Historian; Robert Deason, Hydrogeologist; Julie Bargmann, Landscape Designer; Stacy Levy, Sculptor; AmeriCorps Members; and the people of Vintondale.



## INTRODUCTION

In a trend that continues to build, citizens across the country are joining forces locally to address environmental issues that affect their health, natural resources, and the quality of life in their communities. Groups of people are taking action on local problems such as abandoned waste sites, loss of wetlands, poor air quality, and environmental justice concerns. They are forming initiatives with missions ranging from restoring a watershed to reclaiming a blighted neighborhood to preserving or revitalizing whatever is special about a place—such as a historic waterfront. The trend is a positive one, and the U.S. Environmental Protection Agency (EPA) is committed to supporting environmental management and problem-solving at the community level.

It is useful to look at this community-level trend over the last decade from two perspectives. First, citizens today are better informed about environmental issues than in the past, and they expect to play a more prominent role in decision making. The notion of public “right-to-know” has become mainstream since Congress passed the Emergency Planning and Community Right-to-Know Act in 1986. People have become accustomed to

living in the age of information. Accordingly, they are asking for more and better environmental information, and getting it. If people understand the environmental problems in their communities, they are better equipped, as community stakeholders, to participate in solving them. That’s why EPA is providing more access to more data than ever before—because widely disseminated environmental knowledge clearly encourages citizen stewardship, and brings environmental results.

Second, from EPA’s perspective, it became clear during the last decade that solving the country’s remaining and emerging environmental problems—such as polluted runoff, the unintended environmental consequences of unplanned growth, global warming, and the loss of biological diversity—will require more options than the traditional regulation and enforcement effectively used to control industrial discharges into air and water. It will also require more than action by EPA alone. (For further discussion, see EPA’s April 2000 report, *Innovation at the Environmental Protection Agency: A Decade of Progress*, EPA 100-R-00-020, available at <http://www.epa.gov/opei>—click on “pub-

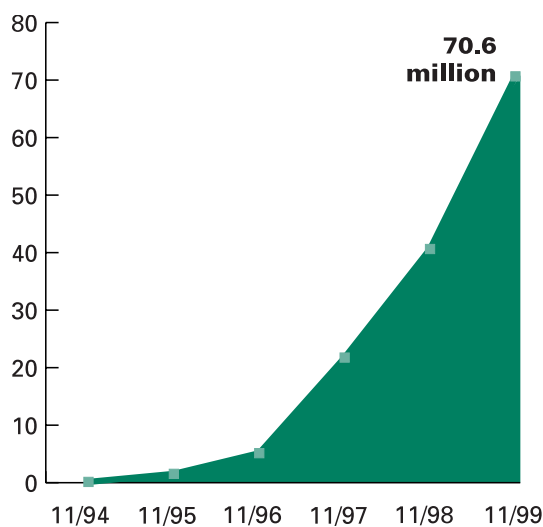


lications”—or by calling 513 891-6561.) That’s why EPA is working increasingly in partnerships with communities, businesses, and others, and developing a larger inventory of tools to make environmental protection work better and smarter for the 21st century. The terms sector-based and community-based environmental protection have been used to describe a wide range of industry-based and community-oriented initiatives where EPA provides leadership or support in some form (see <http://www.epa.gov/sectors> and <http://www.epa.gov/ecocommunity>).

Community grants are part of that expanding inventory of tools and initiatives. This growing inventory also includes EPA’s Brownfields Initiative, which helps communities clean up and restore abandoned industrial properties, bringing them back into productive use (see <http://www.epa.gov/brownfields>). It includes a host of new monitoring and reporting projects to give citizens more up-to-date information about local environmental conditions. An example is EPA’s collaboration with the U.S. Geological Survey, the National Oceanographic and Atmospheric Administration, and the Department of the Interior to bring “real-time” environmental reporting projects to 85 U.S. cities. It also includes EPA’s participation in the Smart Growth Network for sharing information (<http://www.smartgrowth.org>), such as the latest research on development patterns, transportation, and air quality, and updates on state initiatives to counter the unintended environmental consequences of unplanned development.

### Soaring Public Demand for Environmental Information

One indication of the rising demand for information is the dramatic increase in electronic traffic on EPA’s Web site since it was established 6 years ago—from 136,000 monthly “hits” in November 1994 to 70.6 million in November 1999.



Because local problems and priorities vary widely from community to community, individual grants to communities are a particularly effective tool for promoting environmental

protection and community revitalization. The projects profiled in this booklet range from “Envision Utah,” a statewide effort to help Utahns make conscious growth decisions to protect the fragile environmental resources that make Utah a desirable place to live; to turning a former steel slag landfill into a public greenway, as part of an initiative to revitalize downtown Pittsburgh’s urban environment; to developing and testing a “location-efficient mortgage” program as an incentive for transit-oriented living and commuting in Chicago, Seattle, Los Angeles, and San Francisco.

The purpose of this report is to highlight some of the noteworthy accomplishments that communities have achieved, using EPA community grant funding as “seed money.” Geographical diversity and a representative range of project goals were among the considerations for making project selections for the extended profiles, but given so many valuable projects, the selection is partly arbitrary. In addition to 13 extended profiles, an appendix table summarizes community grant awards by state. For convenience, community project profiles have been grouped into four categories, as indicated below, based on their primary focus. Yet many of the community projects have overlapping elements of two or three categories, so the categorizations are not definitive:

- Priority-setting and planning for a greener future
- Revitalizing urban environments
- Protecting and restoring watersheds and airsheds
- Going green through lending and building practices.

The definitive consideration is this: The projects highlighted in this report are all innovative in ways that can best be achieved through strong, but flexible EPA-community partnerships.

### **Aiming for Excellence—Encouraging Community Stewardship**

Strategically encouraging community stewardship is a top priority for EPA—a commitment reflected in actions the Agency publicly announced last summer. The following are two of 10 priority actions highlighted in EPA’s July 1999 report *Aiming for Excellence: Actions to Encourage Stewardship and Accelerate Environmental Progress* (EPA 100-R-99-006):

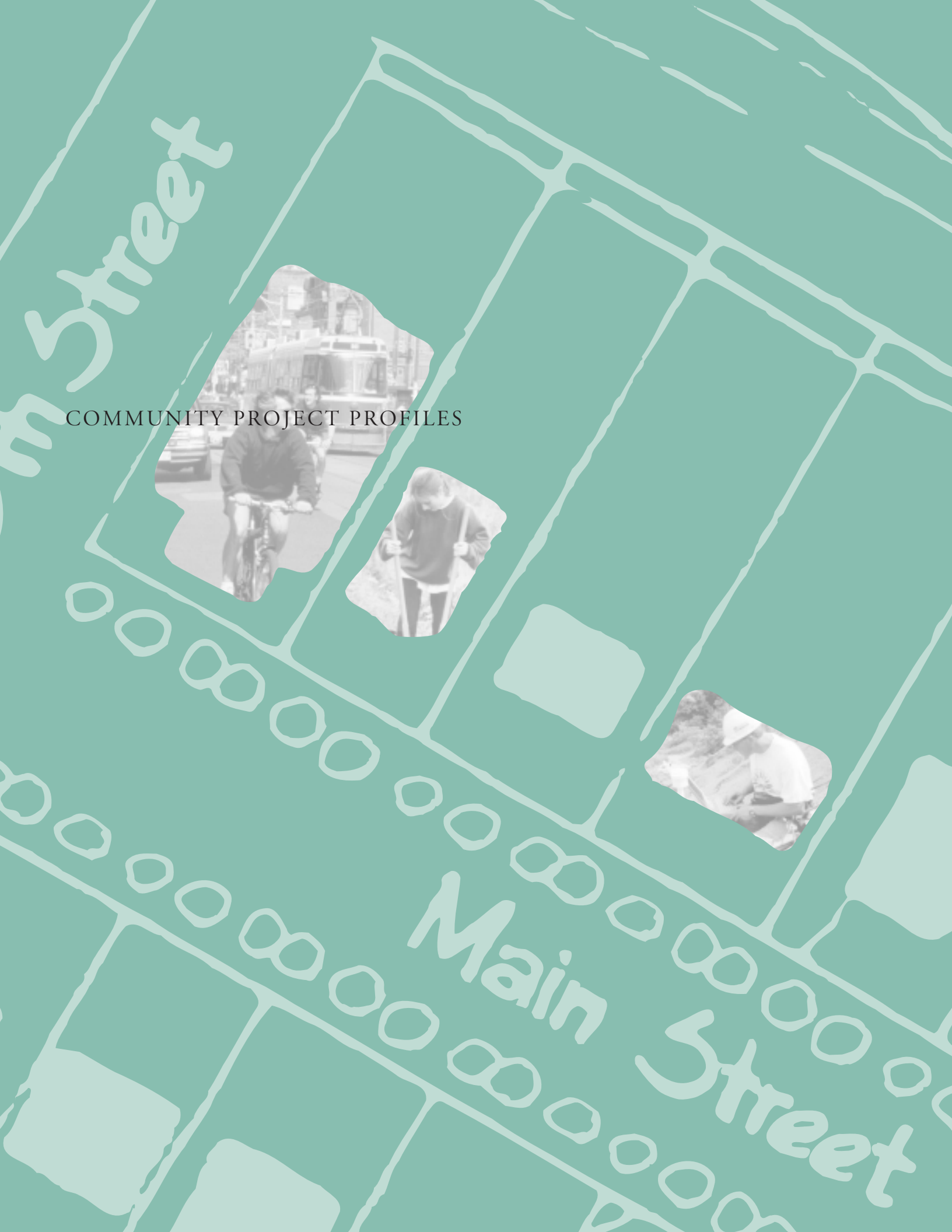
**Action:** Build leadership capacity in communities to participate in local environmental problem-solving.

**Objective:** We will help communities make decisions about issues that improve public health and their local environment by developing environmental management tools, offering technical assistance, and providing facilitation for dialogue on environmental issues. We’ll also include community representatives in Agency decisions about programs or policies that directly affect them.

**Action:** Provide “smart growth” support to states, tribes, and communities to help them find local solutions to livability issues.

**Objective:** Because community development patterns have a great impact on environmental conditions and overall quality of life, we will support and encourage smart growth decisions by individuals, communities, businesses, and state, tribal, and local governments.

For the full *Aiming for Excellence* report online, see <<http://www.epa.gov/opei>> (click on “publications”) or to obtain hard copies, contact EPA’s National Service Center for Environmental Publications at 513 891-6561.



m Street

COMMUNITY PROJECT PROFILES



Main Street

### Envision Utah



**ENVISION UTAH**  
A Partnership for Quality Growth

When the Envision Utah partnership convened in 1996, no one disputed its starting premise—that continued rapid growth is going to be part of Utah’s future. Facts and trends such as these continue to support that premise:

- The population of Utah, which passed the 2 million mark in 1996, is growing at more than twice the national average.
- Nearly 80 percent of Utah’s population resides in the Greater Wasatch Area—the narrow corridor stretching for 100 miles north and south of Salt Lake City on both sides of the Wasatch Mountains.
- Population in the Greater Wasatch Area is projected to grow to 2.7 million by 2020, and to 5 million by 2050.

Envision Utah—a nonpartisan partnership that includes state and local government officials, business leaders, developers, conservationists, landowners, academicians, church groups, and other citizens—is not about trying to slow or stop growth. It’s about managing growth in ways that preserve Utah’s unique and beautiful environment. The Envision Utah partnership has engaged

“EPA’S CHALLENGE GRANT made possible dozens of public meetings, the development of a Quality Growth Strategy for the Greater Wasatch Area, and dissemination of better growth choices to hundreds of thousands of Utahns through a major media campaign in partnership with local media partners.”

—STEPHEN HOLBROOK, Executive Director,  
Envision Utah

Utahns in a democratic process of imagining possible growth scenarios, choosing the growth scenario they prefer, and developing a strategy for implementing the preferred scenario. The primary goal of Envision Utah is to help Utahns make conscious growth decisions to preserve what they most value about where they live. A secondary goal is to create a process that might be adapted by other communities or regions.

The Envision Utah partnership made use of baseline information gathered on Utahns’ values and what they most wanted to preserve or change in the face of rapid growth. The Envision Utah process has two phases. EPA community grants have helped support work related to both Phase 1 (visioning) and 2 (strategy and implementation). Phase 1 (1997–99) accomplishments include the following:

- A baseline computer model that projects the effects of Utah’s growth over the next 20 to 50 years if existing trends continue.
- A series of public workshops in spring and summer 1998 throughout the Greater Wasatch Area, which collected data and opinions from citizens on how to shape future development. Topics explored included land use, transportation, and open space preservation. Public input from these workshops was then used in developing four alternative growth scenarios.
- A wide-reaching public awareness, education, and mass media campaign to encourage citizens to express their preferences and to increase public understanding of challenges and options.
- Development of a preferred growth scenario (see box)—a vision for Utahns’ future, and their children’s future, to guide



Graphic depiction of growth scenario favored by a majority of Utahns.



businesses, residents, and government bodies well into the 21st century.

In 1999, Envision Utah moved into its strategy and implementation phase. Having chosen a preferred growth scenario, Utahns were asked to participate in the development of a Quality Growth Strategy for implementing the scenario. Like Phase 1, this second phase has stressed informed public involvement in a bottom-up decision making process. A multi-year Quality Growth Strategy has emerged from this democratic process. Along with protecting environmental resources and transportation options Utahns consider

### Utah's Preferred Growth Scenario

During its visioning phase, Envision Utah developed four growth scenarios, termed Scenarios A through D, for public consideration. The scenarios form a continuum:

**Scenario A** depicts how the Greater Wasatch Area would develop if the pattern of dispersed development occurring in some communities in the late 1990s were to continue. New development would primarily take the form of single-family homes on large suburban lots. Most development would focus on convenience for auto users, and transportation investments would support auto use.

**Scenario B** shows how the region would develop if state and local governments followed their 1997 plans. Development would continue in a dispersed pattern, much like it has for the past 20 years, but would not be as widely dispersed as in Scenario A. Transportation investments would support auto use.

**Scenario C** shows how the region might develop if Utahns chose to focus much of their development in walkable communi-

ties with nearby opportunities to work, shop, and play. Communities would accommodate a portion of new growth within existing urbanized areas, leaving more undeveloped land for open space and agriculture. New developments would be clustered around a town center, with a mixture of retail services and housing close to a transit line. These communities would be designed to encourage walking and biking, and would contain a wide variety of housing types, allowing people to move to more or less expensive housing without leaving the community.

**Scenario D** shows how the region might develop if Scenario C were taken a step further, focusing nearly half of all new growth in existing urban areas.

At a series of 47 town meetings, and in a growth questionnaire made available on the Envision Utah Web site and in local newspapers, Utahns were asked to vote for their scenario preferences. Questionnaire responses and town meeting results both indicated a majority preference for **Growth Scenario C** (see illustration).

## Foundations for a Green Future: Planning and Priority-Setting

essential to their quality of life, the strategy includes tactics for protecting the environment while accommodating short-term growth spurred by the upcoming 2002 Winter Olympics—as well as longer term growth expected to come from resulting worldwide exposure.

The Envision Utah partnership is continuing its outreach and education activities in 2000

and beyond to build consensus support for the Scenario C Quality Growth Strategy.

Envision Utah has drawn praise as “the first stirrings of a 21st century politics of democratized development in which citizens are asked to choose for themselves” (Neal Peirce in *The Washington Post*). It provides a useful model for regional planning. For more information, see <<http://www.envisionutah.org>>.

## Alliance for Green Development

### ALBUQUERQUE, NEW MEXICO



Kate Hildebrand of Consensus Builders facilitates a strategic planning meeting convened by Albuquerque's Alliance for Green Development.

Albuquerque, New Mexico. With its limited water supply and ecologically fragile natural environment, this fast-growing city in the drylands Southwest is committed to preserving its natural resources and the quality of life of its citizens, despite growth-related pressures. Recent trends such as rising housing costs and increasing per-capita energy use from coal have prompted an initiative to encourage greener building and development practices.

With support from an EPA community grant, the city has created the Alliance for Green Development to bridge divisions over land and water use issues and provide a decisionmaking forum for community planning and resource protection. All those local constituencies that have a stake in housing development are represented in the Alliance, a public/private partnership that includes builders, a smart growth group called 1,000 Friends of New Mexico, affordable housing advocates, proponents of green development, and financial institutions, among others.

“GREEN DEVELOPMENT is an important strategy for improving the quality of life in neighborhoods.”

—MICHAEL BRASHER, Albuquerque City Council President

One of the early steps taken by the Alliance, even before its first public meeting, was to consult community leaders on green development and brownfields redevelopment questions. The views expressed by community leaders (see box) were then shared at the first public meeting, held March 29, 2000. The Alliance has held five public strategic planning meetings. It recently completed a 5-year strategy for changing traditional development and energy use patterns and promoting growth that better serves the environment and the human community.

As part of its 5-year plan, the Alliance is on schedule for the following milestones:

- Designing and implementing a marketing and education campaign to heighten public awareness of the need and opportunities for green development. (By end of 2000)
  - Overcoming institutional obstacles by implementing green standards and proposing changes to city regulations . (By end of 2000)
  - Developing financial incentives to encourage innovative green remodeling. (By July 2001)
  - Laying the foundation for a pilot green development project that demonstrates the financial incentives package. (By June 2002)
- Each of these milestones is a step toward greener development in Albuquerque. But

### Community Leaders' Views on Green Development and Brownfields

Albuquerque's Alliance for Green Development spoke with selected community leaders who had previously expressed interest in "green development" and the redevelopment of brownfield properties. According to the Alliance's working definition of the term, green development is (1) affordable, (2) emphasizes redevelopment and infill (development within existing cities and towns that can save public money by taking advantage of existing infrastructure), (3) promotes products and processes that increase the livability of neighborhoods, (4) uses environmentally friendly building materials (engineered lumber, recycled materials, cellulose insulation), and (5) conserves water and energy.

Key points emphasized by community leaders in telephone conversations with Alliance members include:

- Green development can reduce human impact on the natural environment. It can reduce urban sprawl and cut water and energy consumption.
- The Albuquerque region is a likely market for green building products and services for reasons including the propensities of local people in the homebuilding industry. The region has a distinctive environmental character and a unique landscape that many people want to protect. It has a history with traditional building materials, such as adobe and strawbale—the forerunners of today's green building materials.
- Potential obstacles to green development in Albuquerque include: few financial and regulatory incentives; limited knowledge among development professionals and trade industry representatives; not enough commercially competitive green products, and New Mexico's relatively low level of capital and wealth.
- Key issues the Alliance for Affordable Green Development should address through strategic planning include: spreading knowledge of new products and services, finding ways to promote green products and services, and addressing water and energy costs.
- The most important things for the Alliance to achieve would be: a good strategic plan (with specific actions, responsibilities, and a timeline); successful nurturing of the green development industry; and a measurable increase in the number of green developments.
- Brownfields-related issues that should be addressed through the Alliance include: ensuring that brownfields are clear of health hazards, establishing priorities among brownfield properties, and targeting opportunities for their redevelopment.

greener development patterns, although important, are not the whole picture. Albuquerque will also be redeveloping a number

of its brownfields, an effort supported in part by a recent grant from EPA's Brownfields Program.



### Living Free, Developing Sustainably— Minimum Impact Development

#### NEW HAMPSHIRE

The state motto of New Hampshire, “Live free or die,” goes back to Revolutionary War days. Last year, the New Hampshire Comparative Risk (NHCR) project, with support from an EPA community grant, launched a statewide partnership effort called Living Free, Developing Sustainably—Minimum Impact Development. The project name puts an upbeat twist on the state’s historic motto.

The project itself builds on the achievements of two previous statewide efforts, both supported in part by EPA community grants. The first was a risk-ranking/priority-setting exercise in which a private/public partner-

ship came together to study and rank the risks posed to New Hampshire’s environment and quality of life. That risk-ranking partnership included a 55-member Public Advisory Group and 150 scientists, public health experts, and economists who provided assistance. The second was a similar private/public partnership initiative to develop a set of Recommended Voluntary Management Practices for forestry. Those recommended practices are now being used to sustainably manage New Hampshire’s forests.

Two top-priority issues identified by the 1994–1997 risk-ranking effort are:

- Sound land use.
- Efficient use of energy, natural resources, and materials.

“OUR DESIGN FIRM is in the business of providing ‘healthy’ interior environments to our clients. This project is the perfect vehicle to raise people’s awareness of the possibility of doing things differently, and better. The practice of holistic design will become the norm in the near future, and the information being accumulated and the practices being illustrated by this program will enable new adherents to effect change rapidly.”

—BILL JOHNSON, Vice President of Business Development, H. L. Turner Group, Inc.

In light of those priorities, the partners of the Minimum Impact Development project—which include developers, realtors, bankers, engineers, environmentalists, planners, scientists and regulators—are working to promote good development. The local motto for the project is aptly descriptive—“Maintaining the New Hampshire Advantage.” On the model of the voluntary forestry management practices already in use in New Hampshire, the project will identify voluntary develop-

ment practices that minimize air, land, and water pollution, energy use, and habitat loss. Recommended practices will be tailored to site selection and design; residential, commercial, and industrial buildings, landscaping and grounds; and to neighborhood scales.

In addition, indicators are being created to measure and describe the diversity of density in a continuum across towns, regions, and the state. Indicators will also be used to measure success, over time, in maintaining that diversity of density so essential to New Hampshire.

New Hampshire's voluntary practices for minimum impact development—and related indicator sets—will be published in manual form in 2001. Of course, the voluntary practices and indicators will help protect the state's environment and natural resources only if they are widely used. That's why,

before final publication of the manual, the proposed practices will be widely publicized, and public comments will be solicited and taken into account. Then publication will be followed by extensive public outreach to promote the voluntary practices and the indicators across New Hampshire.

So what do the people of New Hampshire stand to gain if the state's developers widely adopt minimum impact development practices, and the forthcoming indicators really do catch hold? They stand to gain a lot—better protection of New Hampshire's environment and their own quality of life. And once specific, easily understood indicators are agreed upon, citizens can readily track whether, and to what extent, development is evolving toward the minimum impacts required to preserve the environment and quality of life in their state.

### Smart Growth Here!

#### MILWAUKEE, WISCONSIN

Junked cars, abandoned and underutilized industrial facilities, accumulated trash, noxious odors, and contaminated soil and groundwater: Milwaukee's Menomonee River Valley, historically the industrial hub for the city and state, is a vast brownfield. Jobs and development have fled to Milwaukee's suburbs, leaving the Valley impoverished and contaminated. But imagine what this 1,500-acre region could become if groups of people joined forces to clean it up, restore natural habitat, and turn it into a community asset. Milwaukee's Smart Growth Here! Project, supported in part by an EPA community grant, envisions just such a future for the Menomonee River Valley.

In an important milestone for the Smart Growth Here! Project, 134 design professionals from local architectural, engineering, environmental, real estate, and planning firms, and the School of Architecture and Urban Planning at the University of Wisconsin–Milwaukee volunteered to participate in a 2-day design charrette (defined as an intensive group effort to produce an architectural

design or other project). Their purpose was to generate specific design scenarios for revitalizing the Menomonee River Valley. The *Milwaukee Journal Sentinel* (October 21, 1999) covered the event under the headline, “Designers look at gritty valley, and see a grand vision.” (See design sketches on page 13). The vision calls for a mixed-use development that will restore and preserve natural assets such as the river, bluffs, and wetlands while attracting new private sector investors. It includes industry, commercial office buildings, housing, greenbelts, community gardens, and more. The design outcomes of the charrette are being assembled into a publication for release in late August 2000.

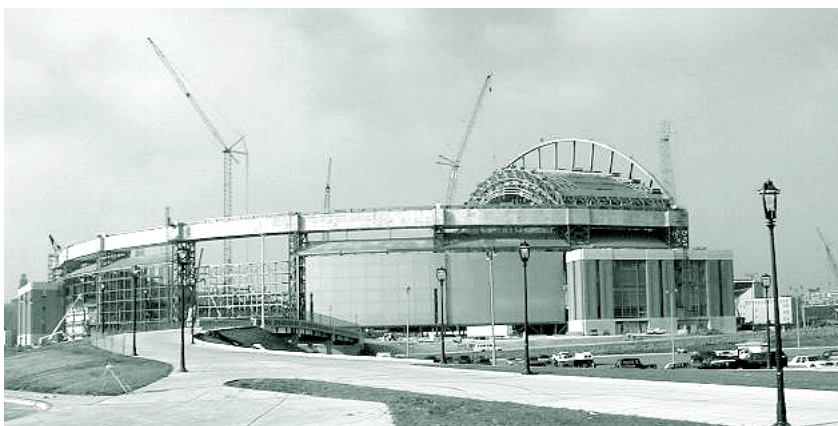
Recent infrastructure developments include a new, artistic bridge spanning the East Valley and the Hank Aaron State Trail running the length of the Valley. For the first time since the turn of the century, these developments will reconnect the Valley to adjacent neighborhoods by accommodating cars, buses, bicycles, and pedestrians.

Other achievements include:

- Developing the information base for identifying environmental, economic, and social indicators that will provide an easily understandable way to measure impacts of development in the Valley and progress toward Smart Growth Here! goals.
- Using *Smart Places* spatial analysis software linked to a Geographic Information System (GIS) to simulate environmental and development scenarios based on real-

#### Miller Park Construction

The new Miller Park baseball stadium on the West End of the Valley.





**Top:** Proposed vision for the East Valley. **Middle:** Proposed mixed-use housing for the East End of the Valley. **Bottom:** A proposal by one of the Urban Design Teams for providing new access to the Valley floor and minimizing the land area devoted to parking lots.

The CM & St. Paul Railroad in the late 1800s and early 1900s. The railroad was the major employer in Milwaukee, and many workers lived in the surrounding neighborhoods.

- istic information gathered through the “benchmarking” effort just described.
- Ensuring sustainability of the Smart Growth Here! Project, by assisting in the creation of a 501 (c)(3) nonprofit economic development corporation, called the Menomonee Valley Partners, Inc. (comprised of business, community and government leaders), to focus efforts on the sustainable redevelopment of the Valley. In addition, the project has facilitated the creation of a Business Improvement District (BID) for the Valley businesses where self-assessed tax dollars will further redevelopment improvements.

But is it really cost-effective to clean up and redevelop a blighted inner city area like the Menomonee River Valley? A cost-benefit analysis will provide specific information on that question.

The \$200,000 community grant from EPA has already helped Milwaukee leverage more than \$1 million in additional funds and in-kind contributions to the Smart Growth Here! effort. In addition, with support from



“THE SIXTEENTH STREET Community Health Center and the EPA grant it received played a crucial role at a crucial time. We were able to create a business improvement district, form an independent nonprofit development corporation, and hold a design charrette where professionals donated their very valuable time. Now it is possible to see a prosperous future for the Menomonee Valley, with thousands of new manufacturing jobs.... Ultimately, all of Milwaukee will benefit from a turnaround in the Valley.”

—JOHN STIMAC, Chairman of the Menomonee Valley Business Association and President of Stimac Bros. Corporation, a dealer in industrial scrap metal and a second-generation Menomonee Valley business

two separate EPA Brownfields program grants, young adults near the Menomonee River Valley are being trained in brownfields remediation work, and the city of Milwaukee is undertaking a groundwater characterization study for the Valley—a further economic boon to the community.

### Repairing Older Suburbs

LOS ANGELES METROPOLITAN AREA  
(AZUSA, BREA, CULVER CITY, MONTCLAIR/POMONA, AND RIVERSIDE)

Inner-city downtowns are not the only urban areas to decline as new jobs and development have moved to outer suburbs. In Los Angeles and other metropolitan areas, many older suburbs have lost much of their former prosperity and are experiencing environmental and social problems along with economic difficulties. Disappearing jobs, a shortage of affordable or adequate housing, abandoned or near-abandoned strip malls, little-used shopping centers with vast parking lots, and aging infrastructure are some of the economic ills experienced by these “inner ring” suburbs. Built in the post-World War II era, they tend to be auto-dependent, with few other transportation options. Their environmental problems include air and water pollution, and not enough green space to provide wildlife habitat or absorb runoff. They also include brownfield sites requiring remediation.

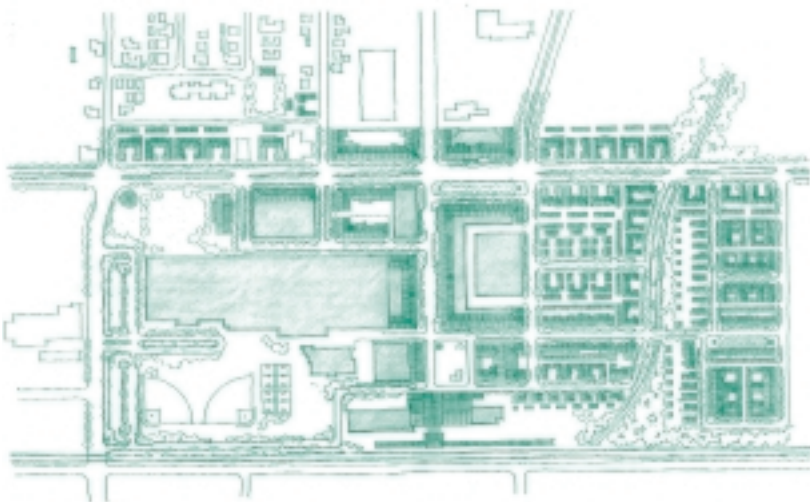
**The Village@Indian Hill**  
Pomona will convert a 1950s shopping mall into an urban neighborhood with commercial and residential buildings clustered around an education and transit center. Public plazas and parks will be included.

“THE EPA CHALLENGE GRANT offered us essential support to create a feasible plan for reusing an aging, economically obsolete regional shopping center. Our conversion of Plaza Azteca into the Village@Indian Hill is now serving as a centerpiece for the revitalization of this long declining post war suburban area. It has also demonstrated how addressing deficiencies in public education facilities can stimulate economic revitalization.”

—PATRICK LEIER, Superintendent of Schools, Pomona, CA

The Local Government Commission (LGC) and the Congress for the New Urbanism (CNU), with support from an EPA community grant, have joined forces to work with five older Los Angeles suburbs to develop and demonstrate strategies for improving conditions in their communities. The suburbs are Azusa, Brea, Culver City, Montclair/Pomona, and Riverside. In particular, this work is focusing on two suburban challenges where there are almost no national models to follow:

- Retrofitting commercial streets and transportation corridors, such as former strip malls.
- Revitalizing older suburban downtown areas so that they are environmentally and economically healthy, and socially attractive.





The role of the LGC and CNU is not to set priorities or prescribe solutions for these communities. Rather, they are helping the communities help themselves by: creating a support network to facilitate communication among the five demonstration communities, providing tools and technical assistance, and working with the communities to document their progress. Tools include Geographical Information System (GIS) software to help the communities understand the outcomes of different revitalization scenarios. Technical assistance ranges from helping communities define technical problems to alerting them to potential barriers they may need to address, such as incompatible zoning codes or lack of financing for infrastructure or public facilities.

While the communities' project plans vary widely, both Brea and Montclair/Pomona are stressing increased transportation options where car-dependency has been the tradition. Brea has a three-part project: revitalizing a somewhat isolated neighborhood known simply as "Neighborhood Four," converting an abandoned rail corridor to a pedestrian and bicycle trail linking Neighborhood Four

to the rest of Brea, and making better shuttle transit available to the community. The Montclair/Pomona project has proposed a new commercial village that will include a major educational center, and is working on pedestrian improvements, especially along routes to and from the new schools under construction in Pomona. If these projects are successful, these communities will become more livable places where children can walk to school, and bicycle travel and public transit will become viable options.

With help from LGC and CNU technical experts, Azusa is working on design and transportation issues while bringing citizens into the process of updating its General Plan. Updating the General Plan is not an end in itself. It is a means to achieve smarter urban design, improved land use, and better traffic circulation, in ways that citizens support because they helped with planning.

The experience and lessons learned by these five Los Angeles suburbs will be published in a "how-to" guide for other older suburban communities, forthcoming by August 2001.

## Reclaiming Nine-Mile Run Site

### PITTSBURGH, PENNSYLVANIA

As many steel plants closed down, Western Pennsylvania was left with thousands of brownfields—abandoned industrial sites that are difficult to redevelop because they are contaminated or perceived to be so. Many of these sites are on prime riverfront property in Pittsburgh and along the Monongahela River.

The city of Pittsburgh is working to reclaim these sites and revitalize its neighborhoods in order to attract people back to the central city. By doing so, Pittsburgh hopes to restore some of the population and tax base it has lost to new developments that have sprawled into the Allegheny County countryside.

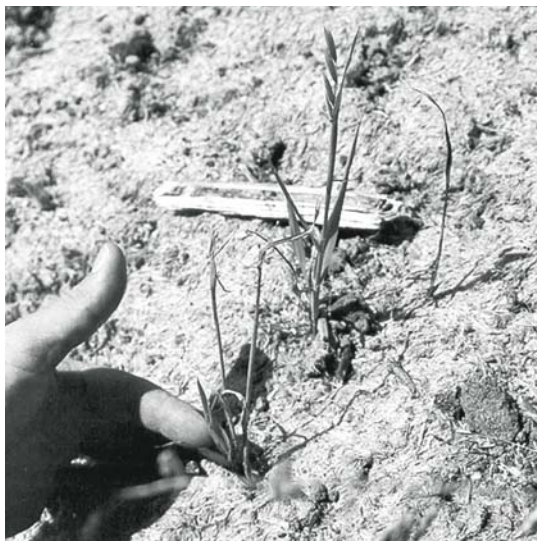
## Revitalizing Urban Environments



**Above:** On the south-facing slope of the Nine-Mile Run site, surface soil temperatures as high as 140 degrees Fahrenheit were recorded on barren slag free of mulch or leaf litter. **Right:** Despite severe drought, some oat plants survived with the help of wet wood fiber hydro-seeding mulch.

The largest of Pittsburgh's brownfields is the Nine-Mile Run site, so named for the stream that runs through it, emptying into the Monongahela. The site is a former landfill for slag from steel-making. On this 238-acre area—the largest undeveloped parcel in the city—city planners envision an extended public park and a new, compact urban development. But first, an industrial wasteland must be restored to a healthy landscape.

With support from an EPA community grant, the city of Pittsburgh is testing new techniques for re-vegetating (greening) the slag slopes and stream valley envisioned as an extension of Frick Park out to the Monongahela River. Monitoring of Nine-Mile Run test plots is ongoing through late summer 2000, and EPA will receive a final report at the end of the year. The aim of this study is to develop specific, low-cost methods for effectively growing vegetation on steep slag slopes that are now largely barren. Once demonstrated as viable, these methods will be used as an alternative to more drastic, expensive steps, such as regrading the slopes and importing cover soil.



**“THE MIRACLE OF FRICK PARK** is that even the Nine-Mile Run Valley, where the slag heaps are being revegetated, is a haven for wildlife. I've seen more mockingbirds in the stream valley next to the slag than anywhere else in this state.”

—**JACK SOLOMON**, Nine-Mile Run Task Force

In addition to turning an unsightly slag pile into a greenway, a covering of green vegetation will significantly reduce or stop wind and water erosion from the slopes, and improve the quality of water runoff. If Pittsburgh can successfully transform the Nine-Mile Run brownfield site into parkland that reaches to the Monongahela, this extension of Frick Park will be a significant cornerstone in rebuilding livable neighborhoods in the central city.

The results of this work will be shared with the towns of McKeesport and Duquesne, which face similar challenges of turning slag sites into usable landscapes.

# Sustainable Ranch Lands Project

## IDAHO



**Above:** Upper Paradise site in Idaho after just one season of time-controlled grazing. Herders moved cattle every day to better use the range and avoid trampling of streambanks and overgrazing. As a result, compared to a year ago, the stream has narrowed so that it is closer to its original width and streamside vegetation is beginning take hold.

**Right:** The ranching community helps restore the Blackfoot River by planting trees along the banks. The trees help control river bank erosion.

Conventional ranching practices have been hard on the environment and hard on ranchers, many of whom are struggling to keep their operations going. Through the Sustainable Ranch Lands Project, the Corporation for the

Northern Rockies and its partners are demonstrating innovative, common-sense ranching practices that are better for the environment, and better for ranchers' economic viability. Support for this work, which will create a transferable model for innovative ranching practices, has come from an EPA community grant, Natural Resource Conservation Service and Bureau of Land Management funding, and other public and private sources.

The Sustainable Ranch Lands Project expands on a predecessor effort, the Blackfoot Watershed Project. By promoting ranching practice reforms within a limited area of state and private lands, the predecessor project significantly improved conditions in the Blackfoot River corridor and upland grazing lands. However, this earlier effort was able to influence ranching practices in just a limited sphere. The Sustainable Ranch Lands Project and the model it is working to perfect are intended to have a much wider impact. Ranchers own most of the private lands in the region and hold grazing leases on much of the public land. Not only do ranching practices affect conditions on both private and public lands, but ranch failures often

mean lost open space and wildlife habitat if lands are divided up for other uses.

The Sustainable Ranch Lands Project has two broad goals. The first is to protect open space, water quality, wildlife habitat, and biodiversity, and restore the overall health of overgrazed rangelands and streambank areas in the Blackfoot Watershed (eastern Idaho). The second is to make ranching more economically viable by introducing—and motivating ranchers to adopt—sustainable practices, primarily through peer-to-peer training within the local ranching community. The project is on track to achieve the following specific objectives by 2001:

- Improve the health of seven miles of the Blackfoot River, segments of four of its tributaries, their streamside environments, and the upland rangelands of the Blackfoot Watershed.
- Double the number of ranchers using sustainable ranching methods in the North-



## Protecting and Restoring Watersheds and Airsheds

ern Rockies. Such methods include low-stress herding practices, as opposed to uncontrolled grazing practices.

- Boost participating ranchers' economic viability by reducing operating costs 15 percent, increasing production capacity 50 percent, and effecting a 5-percent premium on the sale of sustainably produced beef.
- Disseminate information about the ecological and economic benefits of sustainable ranching to ranchers throughout the Northern Rockies.

There is good news from the field. Indications are that participating ranchers have cut their production costs by nearly 15 percent, primarily by reducing use of fossil fuels, fertilizers, herbicides, and other chemicals. Project coordinators have also created a Predator Friendly Project, which certifies wool raised without killing predators and markets the wool products under the "Predator Friendly" label. And just last February, one of the pro-

"THE EPA GRANT has allowed us to use herders to learn some things about the migrating habits of the cattle on upland areas. It has also been critical, in this drought year, to use the herders to move the cattle off the riparian (streamside) areas on public land and place them on private lands during part of the heat of the summer, to keep them from damaging the creeks. Then, as the weather cools, we move the cattle back on the Eastern Idaho allotments. With the use of the herders, we have been able to keep the cattle moved up and away from the stream banks in critical watershed areas."

—KEN WIXOM, President of the Eastern Idaho Grazing Association

ject's predator-friendly ranching partners was honored by *Time* magazine as a "Hero for the Planet"—one of 35 chosen worldwide for their efforts to protect wildlife.

## Fish for the Future

### SOUTHWESTERN OREGON

Salmon fisheries in the Pacific Northwest, once hugely abundant, have declined precipitously. Many species of salmon are formally listed as threatened or endangered under the Endangered Species Act. Many others are being considered for listing. The future of these salmon species depends on the successful restoration and protection of the water quality in their formerly rich spawning habitats in Oregon's streams and rivers.

With support from an EPA community grant to the South Coast Watershed Council, Southwestern Oregon's Fish for the Future Project is demonstrating a comprehensive watershed approach to salmon habitat restoration that works across property boundaries. The project is unusual in that it is coordinating activities on both privately owned and public lands, doing so through a network of partnerships that includes farmers, ranchers, other private property owners,

Fish for the Future works with landowners to help ensure quality fish habitat and clear waters in the Northwest for generations to come. Photo by Deb Smith.

state agencies, and timber companies. The project encompasses nine key watersheds in southwest Oregon's Curry County: Floras Creek, Sixes River, Elk River, Euchre Creek, Lower Rogue River, Hunter Creek, Pistol River, Chetco River, and Winchuck River.

The project has five activity categories—easily remembered because the first letters of the first words in the five categories add up to “FISH’N.” Following are highlights of accomplishments in each of these areas since January 1999, when Fish for the Future was launched:

#### **Farmers and ranchers**

- Assisted ranchers with fish passage problems on their properties by removing culverts that were blocking fish from swimming upstream, and replacing culverts with railroad flatcar bridges. As a result, approximately two miles of spawning and rearing habitat were opened up.
- Farmers and ranchers participating in the project are in turn teaching others in the community about the benefits of watershed restoration. As a result, several additional landowners have signed on to construct protective fencing of streams on their properties. Six miles of fencing have been installed, and 25,000 young native conifers have been planted. Both actions

“IT’S BEEN EXCITING FOR ME to watch the riparian area of my ranch spring back to life with help from Fish for the Future. There are more plants and trees, more fish, more macroinvertebrates—just a wealth of diversity and beauty on my place now.”

—BOB POMMARANE, Curry County Oregon  
Rancher and Farmer



help protect streamside areas and reestablish vegetation, thereby protecting fish habitat and improving water quality by reducing temperature.

#### **In-stream habitat improvements**

- Made habitat improvements on several streams: Indian Creek, Beaver Creek, Jack Creek, Four-Mile Creek, Farmer Creek, and Crystal Creek. These improvements include placing woody debris in streams to help control the flow of sediment as well as to create pools, add complexity to stream flow, and trap gravel for salmon spawning. Near these improvements, there has been increased spawning of salmon.
- Along with habitat improvements, water quality is being monitored, primarily for temperature and pollutant load, which affect fish habitat.

#### **Schools**

- Staged watershed symposium, where student work was showcased in water quality, salmon biology, riparian (streamside) vegetation, erosion control, and other related topics.
- Began program to get every creek and river in Curry County adopted by a local

## Protecting and Restoring Watersheds and Airsheds

school (students then plant trees, pick up litter, and sample water quality).

- Students are actively participating in restoration projects and collecting data. For example, while working on an in-stream habitat improvement project, one high school student found a positive correlation between woody debris deliberately placed to create pools for salmon spawning and both the diversity of species and number of macroinvertebrates present in the stream.

### Human resources

- Sponsored classes for local citizens on topics such as best management practices for

pasturelands (e.g., how to reduce need for artificial fertilizer, improve soil productivity, reduce erosion, and protect streamside areas) and how long-term weather patterns relate to ocean productivity and salmon populations. More than 100 citizens have attended “Watershed Stewards” class, and due to the popularity of this pilot program, it will be offered again in 2000.

### Nature-based tourism

- Enabled five fledgling local eco-tourism companies, which help educate visitors on watershed issues, to market their services on the Internet and in print.

## Acid Mine Drainage & Art Project (AMD&ART)

### PENNSYLVANIA

Vintondale youth and AMD&ART staff in front of the sign they erected for the AMD&ART Remediation Park.

In Appalachian coal-producing areas, thousands of miles of streams have been contaminated with acid mine drainage. Its orange sediment precipitate is deadly to stream life

and affects everything that depends on the stream ecosystem—including human communities. An EPA community grant provided startup funding for the Acid Mine Drainage & Art (AMD&ART) Project, so called because of its artful design of streamside treatment systems.

“We are reclaiming the damage by creating treatment systems that do more than clean the orange out of the water,” explains project director Dr. T. Allan Comp. Referring to the holistic approach of the project, he talks about “transforming environmental liabilities into community assets.” In other words, the acid mine drainage treatment systems address issues broader than water contamination, helping to revitalize whole communities.



“THE AMD&ART PROJECT shows how acid mine water drainage can be treated using a natural process, laid out in an artistic landscape design...adjacent to the already popular Ghost Town Trail. About 75,000 visitors a year use the rail-trail for biking, hiking, horseback riding, or just walking, and many will stop and take a look at the treatment process....In addition, plans call for construction of a community park adjacent to the treatment site, which will tie the community to the project even more. What a positive outcome! I have hopes the bicycle business will benefit, as will the whole town. We have many concerned residents volunteering time and money and working with AMD&ART to see this project through.”

—DAVID J. ROBERTS, Owner, Trailside Bicycle, Vintondale, Pennsylvania

The impact of acid mine drainage on communities can be pervasive. As Dr. Comp says, “Businesses will not come to a town with bad water. Tourists are alarmed by the orange streams and may not return. Residents can’t swim or fish in the rivers, much less drink the water.” Using an interdisciplinary approach that stresses public participation, AMD&ART designs streamside treatment systems that use “passive treatments” such as settling ponds, constructed wetlands, and limestone channels. But AMD&ART doesn’t just create treatment systems—the larger site surrounding the remediation system typically includes active and passive recreational sites, interpretive trails and overlooks, and historic exhibits for the community.

Vintondale resident Jessica Colangelo digs a hole for the Remediation Park sign.

In Vintondale, Pennsylvania, along the South Branch of Blacklick Creek, construction is beginning on a passive treatment system that

has a new community park as part of its design. The 1997 EPA startup grant enabled the planning and design work for this demonstration project to go forward. Since then, 13 agencies and organizations have made financial contributions to this project, and many other agencies and individuals are contributing time, materials, and support. A second demonstration project, in the Dark Shade Creek watershed, has spawned a brownfields revitalization effort for the watershed as a whole. A recently awarded demonstration grant from EPA’s Brownfields Program is funding an inventory and assessment of all the abandoned mine discharges and other sources of industrial contamination within the 28-square-mile watershed, community participation efforts, and initial design work for possible remediation efforts. This is the first brownfields assessment and revitalization effort in a watershed historically dominated by coal mining.

Spinoffs of the AMD&ART project include the “Stream Team,” a network of volunteers



## Protecting and Restoring Watersheds and Airsheds

who do stream monitoring work in the Kiski-Conemaugh River Basin. The Stream Team, founded in 1998 by two AmeriCorps members, recruits and trains volunteers to monitor streams and collect data. The data are then analyzed free of charge by the Pennsylvania Department of Environmental Protection. The results are used by agencies, the AMD&ART project, and the Dark Shade brownfields project to plan remediation strategies for acid mine drainage discharges.

In another spinoff, the Office of Surface Mining and the National Endowment for the Arts noticed the success of the AMD&ART project, and liked what they saw. The agencies are funding two planning projects, one in Ohio and one in Kentucky, that will use the AMD&ART concept to address acid drainage contamination—with additional sites to be selected next year.

## Protecting Water Resources With Land Use Planning

### HOLLISTON, MASSACHUSETTS

Located in central Massachusetts' fast-growing Interstate 495 corridor, Holliston, a town of 14,000 people, lies in the headwaters of two river systems: the Charles and the Sudbury-Assabet-Concord. Consequently, land use decisions made in Holliston, as in other headwaters towns, can affect downstream communities and the region as a whole.

More immediately, land uses in Holliston affect the town's own drinking water supply and its capacity for wastewater management. The town depends on local underground aquifers (water stores) for its water supply. Onsite septic systems provide all wastewater treatment. Currently, Holliston has a septic system failure rate of 30 percent—a cause for concern. (Small lots, a high groundwater table, and local soil conditions are cited as contributing factors.) Future growth and development, if not managed judiciously, could exacerbate existing problems and add new ones. How, then, can Holliston manage

growth and development to safeguard both the quality and quantity of its water resources?

The Charles River Watershed Association (CRWA), with support from an EPA commu-

#### Flow Monitoring

CRWA Senior Engineer Nigel Pickering demonstrates flow monitoring in the Charles River. The Holliston project is designed to address low-flow problems in the river, caused when aquifers are highly stressed.





“ASSISTANCE FROM the Charles River Watershed Association, supported by the EPA grant, is helping bring to fruition the town of Holliston’s efforts to protect its water supply by adopting sound development and land use practices. This work, together with the town’s comprehensive wastewater management planning, is instrumental in defining Holliston’s long-term growth, character, and environmental preservation over the next 20 years.”

—ROSEMARY BLACQUIER, Sewer Project Administrator, Town of Holliston

nity grant, is working with Holliston to develop the information and tools needed to help protect local water resources through land use planning. Holliston has traditionally allowed industrial development in areas that are connected to the town’s drinking water wells—a pattern that could jeopardize the water supply. The tools and information being developed through CRWA’s collaboration with Holliston will provide the town with a framework for evaluating the environmental impacts of development patterns.

The work has these basic components:

- Comprehensive wastewater management planning to identify alternatives for wastewater treatment (town of Holliston), including a sewer system for those parts of town where septic systems were failing.
- Geographic Information System (GIS) analysis by CRWA to answer key questions. For example, how much rain-repel-

lant impervious surface—parking lots, roads, rooftops—exists in Holliston? What lands need to remain as open space in order to allow rainwater to percolate down to ground water—a process called aquifer recharge?

- Hydrologic (water budget) analysis by CRWA to answer questions about the water cycle, as altered by current and future development. How much water does Holliston use now? In future scenarios? What portion of rainwater filters down to ground water? Or runs off into streams and rivers? What development and water use/wastewater treatment scenarios would result in replenishing the aquifer? In depleting it?
- Land use tools developed for consideration by the Holliston Planning Board.

Holliston has completed its comprehensive wastewater management planning and has identified its wastewater treatment sites. CRWA has completed its GIS and hydrologic analyses. Open space remaining in the town has been prioritized based on its comparative importance for protecting water stores and preserving wildlife habitat. Tools and analytical data are scheduled for presentation to the Holliston Planning Board in October 2000. If the comprehensive wastewater plan and other recommendations are put in place, Holliston will restore aquifers and instream flow so that they will be very close to historic norms.

## Land Conservation as a Watershed Protection Strategy— Four Case Studies

Since passage of the Clean Water Act in 1972, federal regulations have effectively controlled industrial and sewage discharges into U.S. waterways, resulting in cleaner waters nationwide. Yet much remains to be done to protect our water supplies. The biggest threat to clean water today is polluted runoff, sometimes called “nonpoint-source” pollution because it doesn’t originate from any single point of discharge, such as a factory or sewer pipe. Instead, polluted runoff absorbs oil from roadways and parking lots, pesticides and fertilizers from farms, lawns, and golf courses, and sewage leaked from septic systems, and deposits these into the nearest stream or river.

According to EPA’s own estimate, 40 percent of the country’s waterways now have degraded water quality. Experts inside and outside of government agree that solving pervasive

runoff problems requires holistic watershed management, with plans and strategies tailored to individual watersheds. So, to advance watershed management, EPA is working with a variety of public and private partners and using a combination of regulatory and nonregulatory tools. One important nonregulatory tool is information—properly analyzed and presented, and shared with communities that can use it.

To promote access to key information, EPA recently provided grant funding support for The Trust for Public Land to assemble and publish four community case studies where land conservation is helping preserve water quality. In these communities, buying land to protect water quality is part of a broader “smart growth” effort to lessen the impacts of development. The case studies are:

- **Austin, Texas**, where pressures from rapid development have prompted the city to look for ways to protect water quality in the Barton Springs/Edwards Aquifer, a major drinking-water source.
- **Barnegat Bay**, a 450-square mile coastal estuary located mostly in New Jersey’s Ocean County, which provides critical wildlife habitat and draws crowds of summer vacationers from New Jersey, Pennsylvania, and New York. To protect the rich natural beauty that has made Ocean County the fastest-growing in New Jersey, and to protect the drinking water wells that residents rely upon, the county is looking to land conservation as an effective way to manage the Barnegat Bay watershed.

“THE BUSINESS COMMUNITY and environmental groups found something to agree on. There was a growing understanding in our business community, particularly the high-tech sector, that quality of life—the fact that Austin is a pleasant place to live—is an important lure for their employees and helps keep the economy vibrant.”

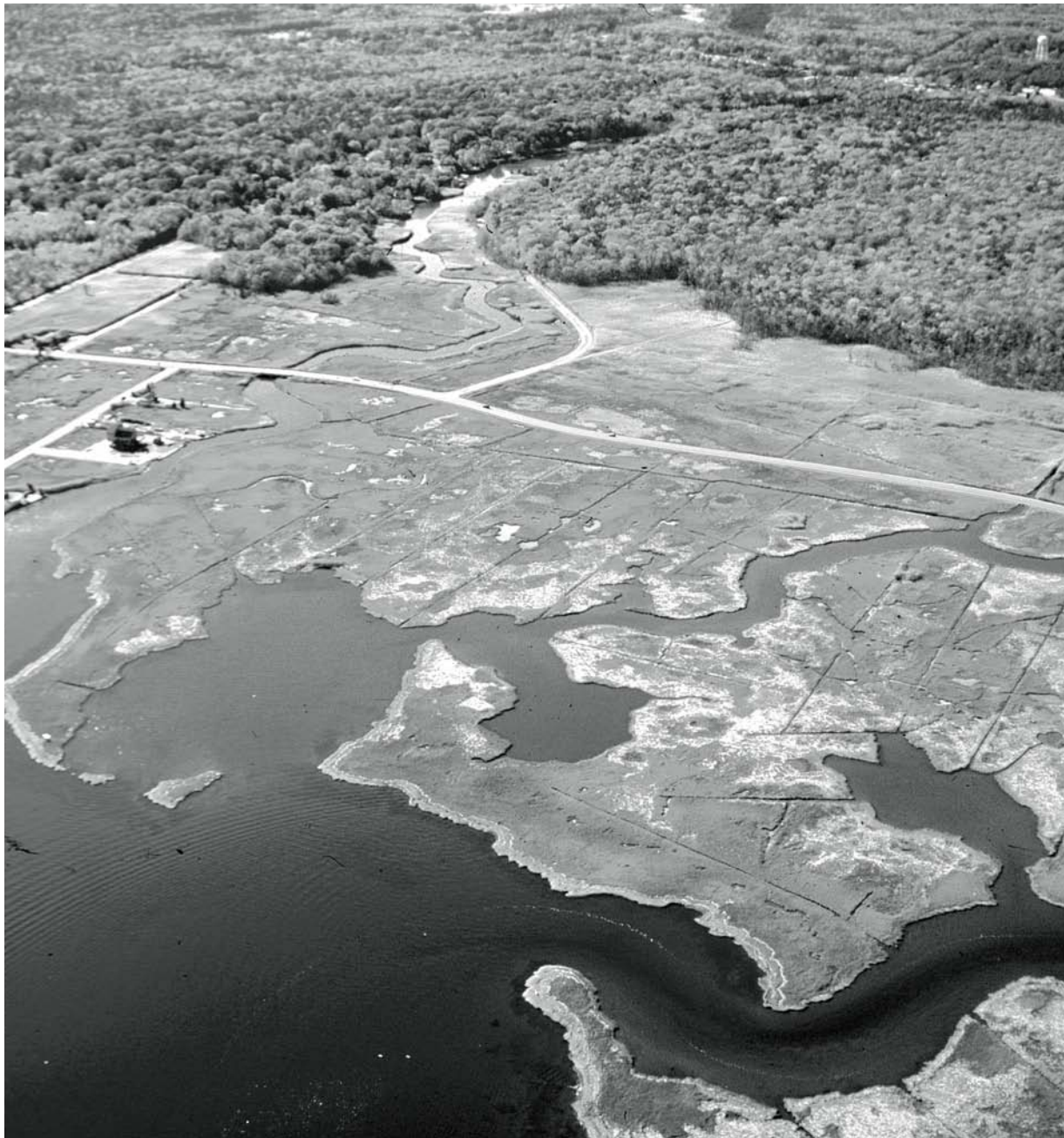
—GRANT GODFREY, staff attorney for Austin’s Save Our Springs Alliance, on the popular support behind the city’s land-protection initiatives to protect drinking water and provide flood control and recreation

- **Mountain Island Lake**, a pristine source of drinking water for Charlotte, North Carolina, and environs. As development along the lakeshore and tributary streams increases pressures on lake water quality, effective watershed management is more important than ever.
- **Indian River Lagoon**, a 155-mile long estuary along Florida's east coast that has been part of EPA's National Estuary Program since 1991. Cooperating partners are

working to protect the estuary's threatened marine and terrestrial ecosystems through strategic land conservation.

The case studies and lessons to be learned from them are published in *Building Green Infrastructure: Land Conservation as a Watershed Protection Strategy*. The report is available from The Trust for Public Land in hard copy and online. See <<http://www.tpl.org/watershed>>.

Covering more than 450 square miles of tidal shoreline, back-bay islands, marsh creeks, and pine and oak forests, the Barnegat Bay region is both a haven for wildlife and a magnet for summer vacationers. Photo © Dwight Hiscano.



## “Green Advantage” Certification Program

LOUDOUN COUNTY, VIRGINIA

Envisioned as an alternative to traditional development, the EcoVillage of Loudoun County is an innovative project now under construction. The EcoVillage is specifically designed to serve environmental and community-building goals—reflected not only in the design of the overall site and individual buildings, but also in its location near a commuter train station.

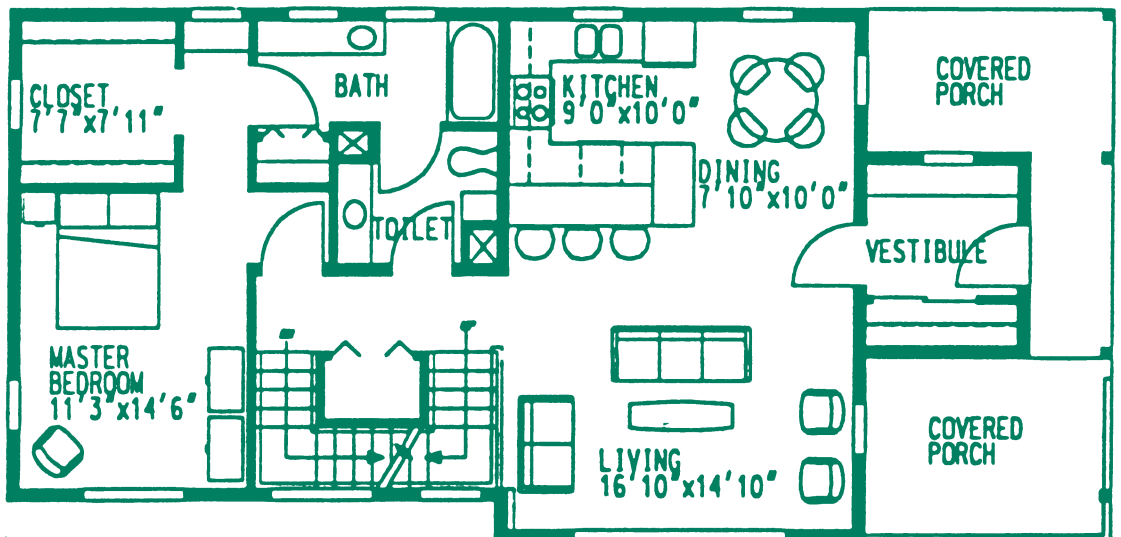
EcoVillage Institute, Inc., a nonprofit organization, assisted in the design and development of this new community. In addition, applying some of the ideas generated through the Loudon project, the institute is creating a special program for training and certifying builders and contractors in techniques for constructing environmentally sound commercial and residential development. The institute’s work to develop and test this “Green Advantage” training and certification program is being supported by an EPA com-

“THIS IS A TOP NOTCH EXAMPLE of environmentally sensitive, conservation-oriented residential development in one of our nation’s fastest growing counties. The effort to share the lessons and techniques learned here with other communities across the country through the Green Advantage Certification initiative is extremely worthwhile.”

—TAMAR DATAN, Vice President, The Nature Conservancy, and Director & CEO, Center for Compatible Economic Development

munity grant. Specifically, the program is being developed for builders and related professionals; for site work contractors, such as excavators; and for developers and other real estate professionals. The EcoVillage development site is being used as a “living laboratory” to field test the program. Green elements

Floorplans like the one at right will feature such environmental attributes as passive solar heating, natural cooling, and daylighting. Illustration copyright 1999 Ensar Group, Inc.



in use on site range from organic landscaping and wetlands preservation to energy-efficient building design strategies (such as passive solar heating, natural cooling, and daylighting) and healthy building materials that protect indoor air quality. Building materials include recycled and renewable products.

In addition to being tested at the EcoVillage site, some aspects of the Green Advantage program are being pilot tested in Florida in summer 2000. The pilot testing will occur in tandem with the University of Florida's

"Build Green and Profit" training workshops, offered throughout the state.

Plans are underway to make the Green Advantage training and certification program available nationwide, once the testing process is complete. The EcoVillage Institute has joined forces with the Nature Conservancy, Science Applications International Corporation (SAIC), and the University of Florida to launch the program nationwide in 2001. A Green Advantage Web site will offer the option of online training and certification.

## Location-Efficient Mortgages

CHICAGO, SEATTLE, LOS ANGELES, SAN FRANCISCO (COMING SOON TO PORTLAND, OR)

In nearly every city across the country, there are compact neighborhoods where it's easy to walk to shops, schools, and other services. In addition, these neighborhoods are usually well served by transit, so that families who live there tend to walk, bike, and take public transit—rather than use a car for every trip they take. Many households in these "location-efficient" neighborhoods own fewer cars than similar households in a conventional suburban development. They also drive their cars less and spend a smaller amount of the

household budget on transportation.

Because these location-efficient neighborhoods are generally very desirable places to live, the cost of buying a house is higher than for a comparable house in a conventional suburban development. As a result, when looking to buy a house, many people decide to live at the edge of our metropolitan areas, where they can afford a bigger house. On the face of it, the choice seems economically advantageous. The problem is that the cheaper house on the edge comes with expensive transportation because everyone in the family has to drive or be driven everywhere. The household has to own more cars, drive them more, contribute more to air pollution through the added emissions of more vehicle miles travelled, and spend more money on transportation than they would in a location-efficient community.

"A COUPLE JOINTLY EARNING \$60,000 and buying into Chicago's transit-rich Edgewater neighborhood, for instance, would qualify for a home selling for \$212,218....Under traditional guidelines, the limit would be \$158,364."

—CHICAGO TRIBUNE EDITORIAL, June 4, 2000

## Going Green Through Building and Lending Practices

Illustration courtesy of the Institute for Location Efficiency

What if a family attracted to a location-efficient neighborhood could take the money they save on transportation by living there and buy a better house in that neighborhood? Then they could invest more money in a nicer home in a great neighborhood, rather than spending it on a car. That's what families are doing in four cities across the country, thanks to a new FannieMae pilot loan program called the location-efficient mortgage (LEM). In addition to boosting borrowing power and increasing family wealth, LEMs can also:

- Increase home purchases in urban neighborhoods and slow sprawl.
- Boost public transit ridership.
- Support neighborhood business, recreation and arts.
- Reduce household energy consumption.
- Improve regional air quality.

The LEM program was developed by Chicago's Center for Neighborhood Technology, the Natural Resources Defense Council, and the Surface Transportation Policy Project in cooperation with FannieMae. Funding for LEM research and implementation was provided by EPA, the Department of Energy, the Federal Transit Administration, and private foundations. The partners in the LEM program are looking to simplify the modeling and mapping requirements that are needed to issue LEMs and hope to expand the



use of LEMs to more cities across the country. If that happens, more families in more cities will be able to afford homes in location-efficient neighborhoods of their choice—a win/win situation for families and for the environment.

For more information on location efficient mortgages, see <http://www.locationefficiency.com>.



## UPDATE ON COMMUNITY GRANT FUNDING OPPORTUNITIES

### **EPA's Innovative Community Partnerships Initiative**

On May 18, 2000, EPA announced its selection of 11 innovative community projects as pilots for its new Innovative Community Partnership (ICP) grants initiative. Overall funding of \$4.4 million for ICP grants has been proposed in the President's Fiscal Year 2001 budget, and EPA plans to launch the full initiative by early next year. EPA expects to use ICP grants to support communities' efforts to solve their environmental problems and make their communities more livable places to live, work, raise families, and participate in community life.

To promote environmental protection and cleaner, more livable communities, EPA will use ICP grants as tools for encouraging local innovation, smart growth, cross-media environmental approaches, and community partnerships working to achieve measurable results. Broadly speaking, EPA expects to give priority consideration to ICP project proposals in the following areas:

- Restoration and protection of community watersheds and airsheds.

- Integrated community planning for environmental results.
- Environmentally responsible redevelopment and revitalization.

If the program is funded, EPA will be working with stakeholders on the final design of its ICP grant criteria and application process. Stakeholders include business leaders, local and state government officials, nongovernmental organizations, rural area representatives, and transportation planners. Feedback from ICP pilot grant recipients will also be taken into account in the ultimate design of the program.

Examples of activities funded in the ICP's pilot stage include the following:

- Developing a learning network for business leaders engaged in the smart growth dialogue.
- Helping a community or communities achieve their vision of smart growth and better environmental quality through better planning, modeling, and community involvement.
- Conducting a workshop on infill development for communities, developers, local government, and the financial community.
- Building capacity to provide rural areas with access to information, training, and technical assistance.
- Developing/providing technical assistance, information, and training to help communities achieve their vision of transit-oriented development and better environmental quality.
- Developing a better understanding of the benefits of combining brownfields redevelopment with transportation planning.

For more information on the proposed program and on established EPA community grant programs, see <<http://www.epa.gov/livablecommunities/grants>>.



## APPENDIX: EXAMPLES OF EPA-SUPPORTED COMMUNITY INITIATIVES, BY STATE

**Note:** The projects listed in this table represent the Sustainable Development Challenge Grant Program, the Innovative Community Partnership pilots, and related programs supported by the Office of Business and Community Innovation. Projects are listed under the grantee’s home state.

### ALASKA

#### **Sitka Tribe of Alaska—Sitka**

Demonstrate how sustainable forestry practices can both provide new jobs and lead to reduced erosion, habitat conservation, and air and water quality benefits.

#### **Akiachak Native Community—Akiachak**

Reduce groundwater contamination and protect wildlife habitat by implementing a comprehensive waste management program that promotes recycling, composting, and waste reuse.

#### **Native Village of Venetie—Venetie**

Demonstrate the viability of using renewable wind power as an alternative to diesel-powered generators to provide fuel for native villages and improve air and water quality.

### ARIZONA

#### **White Mountain Apache Tribe—Whiteriver**

Train tribal members to identify and preserve traditional reservation land use practices that reduce polluted runoff and ensure long-term environmental quality.

**Arizona-Mexico Border Health Foundation—Tucson**  
Train residents in environmental technologies that reduce polluted runoff and hazardous waste.

#### **Arizona State University—Tempe**

Create neighborhood development designs for desert southwest that incorporate smart growth principles and achieve air and water quality benefits.

### ARKANSAS

#### **National Center for Appropriate Technology—Fayetteville**

Improve water quality by educating poultry farmers on best management practices to prevent contaminated runoff.

### CALIFORNIA

#### **Institute for Sustainable Forestry—Redway**

Develop a network of forest industry consumers to share business practices that protect habitat and improve water quality.

#### **Yuba Watershed Institute—Nevada City**

Implement a forest management plan to protect water quality and ensure long-range viability of timbering operations in the Inimim Forest.

#### **Justiceville/Homeless USA—Los Angeles**

Demonstrate techniques for creating urban open space that reduces runoff and encourages materials reuse.

#### **San Francisco League of Urban Gardeners**

Prevent polluted runoff through strategic restoration of urban habitat.

#### **Local Government Commission—Sacramento**

Coordinate demonstrations of “suburb repair” in five older suburban communities in the Los Angeles metro area, reducing air emissions and polluted runoff. Participate in the Partners for Smart Growth Conference and publish an infill guide and report. (See page 14.)

#### **University of California—Davis**

Develop tools for development options that conserve natural resources and wildlife habitat, and protect environmental quality.

#### **University of California/California Department of Health Services—Los Angeles**

Conduct research on urban form, criteria for walkable neighborhoods, related environmental impacts, and children’s health.



**Chemical Strategies Partnership—San Francisco**  
Create a transferable pollution prevention model for reducing chemical use in electronics manufacturing.

**Association of Bay Area Governments—Oakland**  
Develop alternate growth projections showing corresponding improvements in air quality for use in Bay Area transportation funding decisions.

**Global Green USA—Venice**  
Analyze opportunities for environmental improvements in shopping mall siting and construction; produce a report on green construction of shopping malls.

**Congress for the New Urbanism—San Francisco**  
Develop a guidebook on how to build higher density communities that are marketable and meet consumer demands and improve environmental quality. Research and develop a guidebook for design of brownfield and infill redevelopment. Develop and distribute a series of fact sheets that identify economic alternatives and transportation options and demonstrate air and water quality benefits of smart growth in urban areas.

## COLORADO

**Upper South Platte Watershed Protection Association—Larkspur**  
Reduce polluted runoff and protect drinking water through a decision-making framework that incorporates the economic value of ecological resources.

**The Partnering Institute—Larkspur**  
Develop solutions to give local urban Rotary Club members easier access to green choices that will reduce water and energy consumption, improve groundwater and surface water quality, and reduce agricultural waste.

**High Plains Partnership for Species at Risk/Western Governors' Association—Denver**  
Build consensus for projects that achieve water quality improvements through environmentally sensitive range and wildlife management practices.

**Denver Regional Council of Governments**  
Develop a multi-modal transportation plan that will increase transportation choices and improve air quality in the Denver metro area by 2020.

**Sustainable Futures Society—Conifer**  
Demonstrate air and water quality benefits of a community that uses state-of-the-art energy and water efficiency systems, preserves green space, and uses an adjacent wetland for water pretreatment and wildlife habitat.

## DELAWARE

**Naamans Creek Watershed Association—Arden**  
Restore urban green spaces to help reduce stormwater runoff and improve surface water quality.

**Delaware Department of Transportation—Dover**  
Develop a workbook and Web site to help communities preserve farmland, improve air quality, and protect water quality through Delaware's Corridor Capacity Preservation Program.

## DISTRICT OF COLUMBIA

**Sustainable Community Initiatives**  
Help prevent groundwater pollution by training community residents in techniques to reuse and resell salvaged construction waste.

**Trust for Public Land**  
Conduct and publish case studies of land conservation as a tool for water quality protection. (See page 24.)

**National Association of Counties/US Conference of Mayors Joint Center for Sustainable Development**  
Develop a newsletter and the "Joint Center Report." Provide best practices and technical assistance to cities and counties for integrated environmental management. Create a local government primer on smart growth tools that protect natural resources.

**National Association of Counties**  
Develop a video conference for county commissioners on watershed protection and the link between land use, transportation, loss of farmland and open space, and water quality protection.

**National Association of Home Builders Research Center**  
Research and disseminate information on resource conservation in the building industry and provide technical assistance to 10 communities on the potential for deconstruction at specific sites within each community.

**CONCERN, Inc.**  
Create a sustainable communities network Web site, which includes the smart growth network Web site as a subpage and provides information on the environmental benefits of smart growth. Update case studies illustrating environmental benefits of community sustainability.

**National Association of Local Government Environmental Professionals**

Produce a report identifying barriers to brownfield redevelopment and opportunities to overcome them through business involvement.

**National Association of Local Government Environmental Professionals and The Silicon Valley Manufacturing Group**

Protect air and water quality by facilitating partnerships between business and local government to achieve environmentally responsible development.

**Surface Transportation Policy Project**

Research and report on current development patterns and their impacts on land use and costs (two reports).

**Urban Land Institute**

Support three annual smart growth conferences, as well as workshops, exhibits, and a four-part museum exhibit.

**Northeast/Midwest Institute**

Research federal and local government programs that encourage or discourage brownfields redevelopment; hold a conference on research findings. Conduct a workshop to help communities use infill strategies encouraging brownfields redevelopment, lower air emissions, and reduced urban runoff.

**Global Action Plan for Earth**

Research and facilitate implementation of household level environmental improvements, including outreach in several neighborhoods.

**International City Management Association**

Provide education on the environmental benefits of smart growth for ICMA members and other partners in the Smart Growth Network through videos, primers, and newsletters.

**National Neighborhood Coalition**

Produce a report identifying neighborhood smart growth principles and highlight best practices and expected environmental results.

**National Governors' Association**

Support a smart growth conference emphasizing the linkage between smart growth and environmental benefits for governors and their staff. Develop a "toolbox" for governors that includes information on the connection between open space, air and water quality, and how air and water quality improvements can be realized through redevelopment and revitalization.

**Environmental Defense Fund**

Support educational activities and technical assistance on transportation and air quality issues in Baltimore, Maryland, and New York, New York.

**American Farmland Trust**

Support the review of cities' efforts to protect environmental quality by mapping important conservation lands for strategic acquisition. Produce a report on open space preservation efforts in nine cities.

**Natural Resources Defense Council**

Analyze the environmental impacts of New Urbanism and produce a report contrasting the environmental impacts of different neighborhood forms.

**Organization for Economic Cooperation and Development—Paris, France**

Develop innovative financial tools to implement alternative development plans that preserve green space in member countries. This will combine studies of different European countries, Australia and Japan with North America, and develop comparative analysis of urban policy.

**Association of Metropolitan Planning Organizations**

Improve air quality by helping Metropolitan Planning Organizations integrate smart growth approaches in their formal transportation plans.

**FLORIDA**

**University of Florida, Center for Construction and Environment—Gainesville**

Turn a brownfield property into an urban green space capable of treating stormwater runoff in the Sweetwater Branch Watershed.

**Clearwater Marine Aquarium—Clearwater**

Restore natural mangroves along Florida coast to improve water quality, eliminate invasive exotic species, and demonstrate water quality benefits through an education project.

**GEORGIA**

**Coastal Georgia Greenway—Savannah**

Develop a comprehensive planning process to protect water quality by preserving 450 miles of connected open space and natural resource lands in coastal Georgia.

**Northeast Georgia Regional Development Center—Athens**

Develop a conservation design manual that quantifies the impact of development on water quality, wildlife habitat, energy consumption, and loss of natural resources.

**HAWAII**

**City of Honolulu**

Support the city's efforts to promote sustainable economic development through land use and conservation practices that reduce polluted runoff, pesticide use, and air emissions.

**Hawaii Forestry Communities Initiative—Hilo**

Reduce polluted runoff and restore native habitat through rainforest reforestation on the Hamakua Coast of Hawaii.

**Na Moku Aupuni O Ko'alaui Hui—Ke'anae**

Demonstrate how natural filtration systems can be used to treat effluent from aquaculture operations.

**IDAHO (and MONTANA)**

**Corporation for the Northern Rockies—Livingston**

Develop a cost-saving sustainable ranching strategy that protects water quality in the Blackfoot Watershed. (See page 17.)

**ILLINOIS**

**Port Authority of the City of St. Paul**

Demonstrate how industrial facilities can coexist in areas with sensitive environmental features, such as wetlands, without causing environmental harm.

**Growth Management Institute—Chevy Chase, MD**

Facilitate smart growth meetings in the Peoria Tri-County area that foster discussion of transportation alternatives and other environmental benefits.

**Center for Neighborhood Technology—Chicago**

Conduct research, mapping, application, modeling, and market test of the location efficient mortgage (LEM) concept, which promises significant air quality benefits. Refine system of land use consolidation to spur environmentally sensible redevelopment of infill and brownfield property. Research opportunities for low impact redevelopment in south Florida, away from sensitive wetlands and watersheds. (See page 27.)

**INDIANA**

**Purdue University—West Lafayette**

Produce a GIS-based model, accessible on the Internet, showing water impacts of development patterns.

**IOWA**

**Iowa Department of Natural Resources—Des Moines**

Demonstrate how communities can achieve cost savings from improved energy efficiency and use those savings for programs that reduce waste, improve water quality, and promote green business.

**Central Iowa Council of Governments—Cedar Rapids**

Create environmental benefits and affordable housing by rehabilitating older buildings.

**KANSAS**

**Kansas Rural Center—Whiting**

Demonstrate pollution prevention and habitat restoration methods for farming and ranching communities in Kansas.

**Sustainable Manhattan**

Develop an integrated planning strategy for Manhattan, Kansas, linking transportation, land use, and environmental protection.

**KENTUCKY**

**UJIMA Community Council—Louisville**

Formulate and implement land use strategies that increase transportation choices, create opportunities for brownfield redevelopment, and improve air and water quality.

**LOUISIANA**

**Tensas Pride—Winnsboro**

Restore Tensas River Basin in Northeast Louisiana, increasing wildlife habitat and improving air and water quality.

**Mid-City Green Project—New Orleans**

Construct a waste recycling/reuse program that addresses region-wide concerns about declining land-fill capacity.

## MAINE

**Maine Casco Bay Estuary Project—Portland**  
Clean up and restore Casco Bay to achieve water quality that sustains the local shellfishery industry.

**Environment Northeast—Rockport**  
Prevent pollution and improve resource efficiency by adopting green business technology.

**Coastal Enterprises, Inc.—Wiscasset**  
Demonstrate new farming practices that reduce pollution and energy use while increasing economic vitality.

## MARYLAND

**Prince George's County Department of Environmental Resources—Largo**  
Restore waterfront property to a green space that showcases best practices for managing stormwater runoff.

**Center for Chesapeake Communities, Inc.—Annapolis**  
Quantify changes in water quality (total sediment loads, total nitrogen and phosphorus loads, and impacts on habitat) resulting from alternative (as opposed to conventional) site development plans. Document environmental, economic, and other benefits of conservation design.

**University of Maryland Environmental Finance Center—College Park**  
Organize a series of charrettes and report on local incentives for protecting air and water quality while retaining urban core economic vitality.

**Center for Watershed Protection—Ellicott City**  
Support local multi-stakeholder process analyzing local development codes that could promote greater watershed protection and economic goals.

**Foundation for Intermodal Research and Education—Greenbelt**  
Develop local freight movement strategies that will generate air and water quality benefits and help address increases in vehicle miles traveled and congestion associated with e-commerce freight traffic.

## MASSACHUSETTS

**Town of Adams**  
Develop a comprehensive action plan for municipal agencies to practice resource conservation, recycling, and pollution prevention in their daily routines.

**Metropolitan Area Planning Council—Boston**  
Document environmental impacts of current and alternative fiscal policy options.

**Conservation Law Foundation—Boston**  
Protect regional air quality through planning and public education around expansion of a regional rail network in Northern New England. Document local government policy options for environmental protection and economic development.

**Connecticut River Watershed Council, Inc.—Easthampton**  
Organize a roundtable and report on strategies and tools that sustain agriculture, maintain open recreational lands, and renew the urban centers in the watershed.

**Charles River Watershed Association—Auburndale**  
Assess current development plans and patterns in Holliston, Massachusetts, to determine threats to water quality and aquifer recharge, and explore planning options for protecting the water supply. (See page 22.)

**Association for the Preservation of Cape Cod—Orleans**  
Identify and document development patterns that protect water quality and conserve natural resources.

**Southeast Regional Planning and Economic Development District—Taunton**  
Investigate alternative development plans for use by cities and towns in Southeast Massachusetts that improve the environment and quality of life.

## MICHIGAN

**Les Cheneaux Chamber of Commerce—Cedarville**  
Develop a low-impact economic development strategy emphasizing protection of water and air quality in Great Lakes community.

**University Committee for a Sustainable Campus—East Lansing**  
Develop a sustainability curriculum for Michigan State University and apply sustainable development principles to university procurement practices, energy use, and solid waste management.

**Springfield Township—Davisburg**

Develop a preservation plan and maps of critical natural features for Shiawassee and Huron Headwaters, highlighting advantages to developers and property owners.

**MINNESOTA****The GREEN Institute—Minneapolis**

Design a construction waste reuse and recycling program that will foster green business practices among builders in the Phillips neighborhood of Minneapolis.

**Land Stewardship Project—Lewiston**

Develop sustainable farming practices that conserve fossil fuels, reduce water and energy consumption, improve air and water quality, and reduce agricultural waste.

**MISSOURI****Grace Hill Neighborhood Services—St. Louis**

Protect water quality, improve plant diversity, and promote eco-tourism in a low-income area of St. Louis by restoring native plant species along the Riverfront Trail.

**Mid-America Regional Council—Kansas City**

Provide local governments with a toolbox of model codes and ordinances that can help improve air quality, reduce water pollution, and protect green and open space.

**Bridging the Gap—Kansas City**

Partner with three local businesses to develop model sustainable business policies and practices that reduce air pollution and groundwater contamination.

**Marshall Saline Development Corporation—Marshall**

Determine viability of producing renewable bio-based solvents, lubricants, and fuel using local crops and recycled oils to reduce waste and toxics.

**MISSISSIPPI****Mississippi Band of Choctaw Indians—Philadelphia**

Protect water quality through a demonstration project that restores and expands swamp cane stands used in traditional tribal industries.

**MONTANA****Flathead Economic Policy Center—Kalispel**

Promote basin-wide forest management practices to reduce erosion and stream siltation of the Flathead River, one of the richest and most pristine resource areas in the U.S.

**National Center for Appropriate Technology—Butte**

Protect water quality and quantity by demonstrating water and energy conservation techniques for crop irrigation.

**NEBRASKA****Nebraska State Recycling Association—Omaha**

Redevelop abandoned urban properties according to green building principles and showcase the solid waste reduction and energy efficiency benefits gained as a result.

**Prairie Plain Resource Institute—Aurora**

Support community-based efforts to protect water quality, habitat, and wildlife in Middle Platte Watershed.

**Center for Rural Affairs—Walthill**

Provide training in establishing small livestock production facilities that are compatible with local environmental carrying capacity.

**NEVADA****Southern Nevada Regional Planning Coalition—Las Vegas**

Protect air and water quality by developing an integrated regional plan for Southern Nevada that links transportation and land use.

**NEW HAMPSHIRE****Protection of New Hampshire Forests—Concord**

Educate landowners and foresters on how environmental protection can improve the economic productivity of forestry operations.

**New Hampshire Comparative Risk Project—Concord**

Promote voluntary strategies for low impact development that reduce environmental risks to New Hampshire communities. (See page 10.)

**Stafford and Rockingham Planning Commissions—Dover and Exeter**

Develop innovative zoning and planning options to accommodate development and protect water quality in New Hampshire's seacoast communities.

**The Initiative for 20/20 Vision for Concord—Manchester**

Achieve air and water quality benefits associated with brownfields redevelopment and downtown revitalization through community visioning process, curriculum development, awareness building, and comprehensive transportation planning.

**NEW JERSEY**

**Habitat for Humanity—Newark**

Protect urban green space and provide transportation choices that reduce community-wide air emissions.

**The Regional Planning Partnership, Inc.—Princeton**

Demonstrate innovative planning and development options that reduce air pollution and increase transportation and housing choices.

**Rutgers University—New Brunswick**

Achieve environmental benefits through development of curricula on low-impact urban and organic farming practices that reduce environmental impacts of agriculture. Compare the air and water quality impacts of urban brownfields redevelopment with conventional development patterns in two New Jersey counties.

**NEW MEXICO**

**City of Albuquerque**

Develop a plan to promote energy efficiency and green building practices in Albuquerque. (See page 8.)

**Tseikiin Community Development Corporation—Ramah**

Develop and market sustainable agricultural products, processes, and enterprises for Navajo Community Development Corporation that are compatible with the local environment.

**City of Las Cruces**

Help restore the Rio Grande River by developing a plan for low impact development in Mesilla Valley, New Mexico, and implementing a pilot wetlands restoration project.

**Cornerstones Community Partnerships—Santa Fe**

Protect the local environment and reduce the need for manufactured materials by reintroducing sustainable building methods appropriate to the environmental resources of the Acoma Pueblo and the cultural needs of its people.

**Great American Station Foundation—Las Vegas**

Protect air quality and reduce vehicle miles traveled by providing training and assistance to communities seeking to revitalize commuter rail stations.

**NEW YORK**

**The Nature Conservancy—Rochester**

Restore and preserve Rome Sand Plains, a wildlife habitat and wetlands area, and eliminate illegal dumping within the city of Rome, New York.

**Utica Community Action, Inc.—Utica**

Develop a city-wide plan and green map outlining strategies to promote economic and community revitalization through environmentally sound practices.

**Broadway Management Corporation—Buffalo**

Provide a direct agri-products market in the center city, reducing vehicle miles traveled, and protecting and preserving environmentally beneficial regional farmland.

**Cornell University—Ithaca**

Investigate impact of different forms of urban development on air quality, and examine policy opportunities at federal, state, and local levels.

**Cornell Cooperative Extension Association—Onondaga County**

Plan and manage a demonstration project illustrating the air and water quality benefits of restoring streamside forest buffers in metropolitan areas.

**New York Rural Water Association, Inc.—Claverack**

Prepare local source water protection plans for three towns, and develop a guide for other communities to use, including model ordinances and educational tools.

**NORTH CAROLINA**

**Mountain Valleys Resource Conservation and Development Council, Inc.—Asheville**

Protect water quality and farmland by helping farmers make the transition from conventional burley tobacco farming production to organic farming.

**North Carolina Arboretum—Asheville**

Demonstrate environmentally friendly production techniques for local industry.

**Southern Growth Policies Board—  
Research Triangle Park**

Develop a visioning issue book and facilitator's handbook to help local elected officials better understand how growth and development decisions affect air and water quality.

**NORTH DAKOTA**

**Lake Agassiz Regional Development Corporation—  
Fargo**

Identify local government options to reduce development in environmentally sensitive areas, such as floodplains and wetlands.

**Spirit Lake Nation—Fort Totten**

Develop incentives and policies to protect environmentally sensitive natural areas from development.

**OHIO**

**Rural Action—Athens**

Promote sustainable forestry practices to reduce erosion and polluted runoff and restore streams and waterways.

**Center for Urban Studies, Youngstown State  
University**

Develop a comprehensive strategy for revitalizing the Mahoning River Corridor in two Eastern Ohio counties, site of many former steel mills.

**Chagrin River Watershed Partners, Inc.—  
Willoughby Hills**

Improve water quality by reducing impervious surfaces and developing model ordinances for watershed protection.

**Detroit Shoreway Community Development  
Organization—Cleveland**

Demonstrate how redevelopment consistent with the principles of green building and smart growth produces air, water, solid waste, and energy benefits in an established urban community.

**EcoCity Cleveland**

Develop an interactive Web site about the Northeast Ohio Bioregion to help citizens plan for urban revitalization and open space preservation. Organize a Sustainable Communities Symposium 2000 to create a 5-year environmental protection plan to move the region towards sustainability.

**Portage County Regional Planning Commission—  
Ravenna**

Create 20-year build-out scenarios and develop indicators that identify groundwater availability and groundwater pollution potential.

**Case Western University—Cleveland**

Create an analytical framework to identify environmental and economic sustainability of alternative development patterns.

**The Clean Air Conservancy—Cleveland**

Investigate financial incentives as a means of achieving sustainable land use and improved air quality.

**The Northeast Ohio Regional Alliance—Cleveland**

Promote regional capacity building that fosters regional cooperation and collaboration to improve air quality and reduce polluted runoff.

**Kent State University—Kent**

Review existing growth models and their capacity to evaluate environmental impacts and collect local data for environmental impacts of growth in 15-county area; provide information on the Internet.

**OREGON**

**Center for Watershed and Community Health—  
Springfield**

Promote reuse, recycling, and remanufacturing through materials reuse programs in the Hood River area.

**Harvest Built Homes—Ashland**

Demonstrate the air pollution, energy consumption, and resource conservation benefits of straw bale housing construction.

**Fish for the Future—Gold Beach**

Apply a comprehensive watershed approach that reduces nutrient loads and restores Oregon Coast salmon runs. (See page 18.)

**Sustainable Northwest—Portland**

Work with Pacific Northwest communities to implement sustainable forest management plans and to achieve air and water quality benefits.

**City of Eugene Solid Waste/Recycling Program**

Demonstrate a school district food waste composting program and accompanying student curriculum with the goal to reduce landfill waste stream by 150 tons annually.

#### **Portland Community Design**

Compare the costs and environmental benefits of conventional Habitat for Humanity building design with green/sustainable building practices in a community of 12 rowhouses.

#### **1000 Friends of Oregon—Portland**

Support information exchange among members of the National Growth Management Leadership Project and the public, and produce a report on drivers and environmental impacts of current development patterns.

### **PENNSYLVANIA**

#### **Center for Sustainable Living—Chambersburg**

Establish a network of 26 organic farms to reduce agricultural runoff and reduce pesticide use.

#### **The Bottle Works—Johnstown**

Reduce contamination from acid mine drainage by constructing wetland treatment centers that are assets to communities. (See page 6.)

#### **Greensgrow Philadelphia Project—Philadelphia**

Demonstrate water quality benefits of innovative redevelopment of post-industrial brownfields for urban agriculture.

#### **City of Pittsburgh**

Protect water quality by revegetating a slag landfill, returning the land to productive urban green space in a revitalized central city neighborhood. (See page 15.)

### **PUERTO RICO**

#### **Universidad Metropolitana School of Environmental Affairs—San Juan**

Educate residents and decision-makers on the environmental, economic, and social impacts of current development practices and provide models of more environmentally friendly alternatives.

### **RHODE ISLAND**

#### **Grow Smart Rhode Island—Providence**

Analyze environmental and other impacts of sprawl, conduct focus groups on Rhode Island's growth patterns, and create a comprehensive set of tools for development with improved environmental, economic and community outcomes.

#### **Rhode Island Department of Environmental Management—Providence**

Develop a water quality protection strategy that focuses on the use of market-based incentives in environmentally suitable areas of the Pawtucket watershed.

### **SOUTH CAROLINA**

#### **Colleton County R&D Board—Waterboro**

Explore development options to protect natural resources in one of the nation's largest remaining wetland ecosystems.

### **SOUTH DAKOTA**

#### **Inter-Tribal Bison Cooperative—Rapid City**

Educate tribal members about the best management practices to reduce pesticide use and polluted runoff resulting from conventional bison ranching.

#### **The Center for Permaculture as Native Science—Mission**

Educate the tribal community on techniques for decreasing soil erosion and groundwater contamination and saving energy.

### **TENNESSEE**

#### **University of Tennessee Center for Industrial Services—Knoxville**

Demonstrate viability of using sawmill waste, which is typically landfilled or stockpiled, to improve water quality and reduce solid waste.

### **TEXAS**

#### **Austin Parks Foundation—Austin**

Develop and implement a Watershed Action Plan for Bull Creek that will protect water quality and preserve native animal and plant species within the watershed.

#### **4H Capital Project—Austin**

Facilitate collaboration with school and transportation officials to educate community on transportation choices and their environmental benefits.

#### **Organizacion Progesiva de San Elizario—San Elizario**

Demonstrate energy efficient construction of low environmental impact, resident-built solar housing in the Texas colonias.



#### **El Paso Solar Energy Association**

Demonstrate the feasibility of using individual, low-cost solar stills to provide safe drinking water in homes without indoor plumbing.

#### **Clay County Commissioners Court—Henrietta**

Demonstrate effectiveness of experimental home waste treatment systems to replace septic field and aerobic treatment systems in heavy clay soils.

### **UTAH**

#### **Coalition for Utah's Future—Salt Lake City**

Launch visioning process and develop follow-through development strategy for “Envision Utah” project designed to protect air and water quality in Wasatch Front communities. (See page 6.)

#### **North Fork Preservation Alliance—Provo**

Develop and disseminate guidelines for design and construction practices to protect the environment in mountain communities.

### **VERMONT**

#### **Antioch University—Keene**

Demonstrate environmental indicators as a tool to stimulate regional policies that balance environmental protection and economic growth.

#### **City of Burlington**

Combine integrated planning, green business, and smart growth efforts to create a community model for sustainability and long term environmental protection.

#### **Northeast Stewardship Project Natural Resources Center—Concord**

Support grassroots effort to encourage sustainable forestry practices in the community and protect environmental quality.

#### **Vermont Department of Housing and Community Affairs—Montpelier**

Develop plans and guidelines for addressing land use and transportation choices along Vermont Interstate exchanges to improve environmental quality and protect natural resources.

#### **Green Mountain Institute for Environmental Democracy—Montpelier**

Convene forums among multiple stakeholders around the country on sustainable development topics, including urban sprawl, that will provide tools to achieve environmental sustainability.

### **VIRGIN ISLANDS**

#### **Nature Conservancy—Christiansted, St. Croix**

Create a prototype facility that will demonstrate pollution prevention technologies for sustainable island living.

### **VIRGINIA**

#### **Friends of the Rappahannock—Fredericksburg, MD**

Identify and implement low-impact development practices that protect the environmental quality of the Rappahannock River Watershed.

#### **Thomas Jefferson Planning District Commission—Charlottesville**

Demonstrate growth management practices that further local protection of air, water and natural resources.

#### **EcoVillage Institute, Inc.—Loudoun County**

Develop and test a program to train builders in low-impact techniques. (See page 26.)

### **WASHINGTON**

#### **Olympic Peninsula Foundation—Port Townsend**

Improve water quality, and preserve habitat and stream flow of Washington state waterways through industry incentives to employ sustainable forest management techniques.

#### **Free Ride Zone—Seattle**

Improve air quality and reduce landfill-bound waste by introducing alternative transportation to inner city neighborhood.

#### **Pilchuck Audubon Society—Everett**

Develop a short course for local officials, including a video, on sustainable communities that protect air and water quality, and encourage preservation of habitat and natural resources.

#### **Fiber Futures—San Francisco, CA**

Assist communities in targeting agricultural crop residues, which are typically burned, to use as feedstock resources for manufacturing pulp and paper, building materials, textiles, and other fiber-based products.

## WEST VIRGINIA

### **The Lightstone Foundation, Inc.—Moyers**

Develop a working model to demonstrate and train communities on how green design and construction technologies contribute to better water quality, resource conservation, and energy savings.

## WISCONSIN

### **16th Street Community Health Center—Milwaukee**

Develop a comprehensive smart growth strategy for revitalizing and restoring the Menomonee River Valley. (See page 12.)

### **The Wisconsin Farmland Conservancy— Menomonie**

Develop a plan for use by a local government to create an affordable, environmentally sustainable neighborhood that reduces polluted runoff and protects the environment.

## WYOMING

### **Big Horn County—Basin**

Provide a GIS tool to the planning board to assess environmental impacts of current development patterns and identify alternatives to protect open spaces of ecological significance.



## FOR MORE INFORMATION

For more information about tools and resources to assist local efforts to achieve cleaner, more livable communities, see the following EPA Internet site—<http://www.epa.gov/livablecommunities/>—or call EPA’s Development, Community, and Environment Division at 202 260-2750.

Besides EPA, many other organizations—both governmental and nongovernmental—provide information and assistance for community livability initiatives. Useful Internet sites include:

White House Livable Communities Initiative  
<http://www.livablecommunities.gov/>

Smart Growth Network  
<http://www.smartgrowth.org/>

Congress for the New Urbanism  
<http://www.cnu.org/>

Center for Neighborhood Technology  
<http://www.cnt.org/>

Center for Livable Communities at the Local Government Commission  
<http://www.lgc.org/clc/>

Department of Energy—Center of Excellence for Sustainable Development  
<http://www.sustainable.doe.gov/>

## About This Report

To request additional copies of this report, call EPA’s National Center for Environmental Publications at 513 891-6561 and ask for Publication # EPA 240-R-00-002. Or you may call EPA at 202 260-2750.

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