



Compendium of Model Sustainability Practices **parks & open space**

ECO-CITY ALEXANDRIA
environment | economy | community



PARKS AND OPEN SPACE

INTRODUCTION

Park land and other open space are critical elements of an eco-city, playing key roles in ensuring ecological and environmental health as well as the physical and mental health of its citizens. Green space in the city provides buffers for rivers and streams that filter out harmful pollutants, habitat for wildlife, and trees that lower the temperature of the urban heat island. Green space also provides land for passive and active recreation as well as for community gardens and urban agriculture.

Alexandria’s Department of Recreation, Parks and Cultural Activities has initiated a number of plans and programs to enhance the city’s nearly 1,000 acres of parks and open space. The Open Space Master Plan guides the overall efforts to increase and improve Alexandria’s green infrastructure. An Urban Forest Master Plan is nearing completion, as is a Pedestrian and Bicycle Transportation Study. The Four Mile Run Restoration Master Plan has numerous recommendations for greening the stream corridor. And the development of a Waterfront Plan promises to enhance Alexandria’s Potomac River waterfront, a key environmental, cultural, and economic feature of the city.

One of the most important components of Alexandria’s parks and open space is its green infrastructure—trails and greenways. These provide passageways for wildlife, connecting critical habitat areas. They also provide opportunities for walking, biking, and other recreational activities. Trail and greenway development has become a priority for many local jurisdictions, particularly since the passage of ISTEA in 1991, which provided Enhancements funding for trail building. Communities have developed other innovative ways to fund and build trails, including private sponsorship.

One notable source of funding for parks and open space acquisition is the Land and Water Conservation Fund, which has provided money to states and local government since the 1970s. However, as this funding has diminished over the years, communities have had to create new sources of funding—including taxes, bonds, and other revenue-generating means—to acquire open space land. Alexandria has a dedicated Open Space Fund but might consider expanding it through alternative funding mechanisms.

A recent trend in parks and open space development is urban agriculture and community gardens. Community gardens not only provide a productive use for vacant land but also a local food supply and recreational and spiritual activity for urban residents. Alexandria has a Pocket Park program and a community gardens initiative, but might consider some of the innovative urban agriculture programs that other cities have pioneered.

In recent years, communities have also been working to enhance the ecological health and biodiversity of open space. Setting land aside for wildlife habitat with minimal human intrusion is one such trend; creating pesticide- and herbicide-free parks is another.

The model practices included in this section of the Compendium fall into four categories: Green Infrastructure and Community Greening, Creating and Enhancing Parks and Trails,

Funding Open Space, and Enhancing Biodiversity and the Ecological Health of Open Space. This section also includes a list of supplemental programs, plans, and policies that complement the model practices. Finally, at the end of this section is a list of useful open space resources and references.

GREEN INFRASTRUCTURE AND COMMUNITY GREENING

1. Philadelphia Green

Location:	Philadelphia, Pennsylvania
Department:	Department of Conservation and Natural Resources; Department of Planning; City Council
Start Date:	1974
Budget and Staffing:	Planning staff and City Council, as needed. This program is run by a non-profit entity.
Description:	<p>Since 1974, the Philadelphia Green program has supported the development and ongoing care of community gardens, neighborhood parks, and high-profile public green spaces in Philadelphia. The program promotes city-wide greening, land management, and establishment of local food sources (community gardens). The Pennsylvania Horticultural Society (PHS) contributes manpower and funds raised from numerous sources. The City contributes a small amount, but most of the money is raised or donated.</p> <p>Through this program the PHS works with local neighborhoods improve spaces around them – especially vacant properties which have been shown to increase crime and decrease property values. Community members design, build, and maintain newly created open spaces, some of which are used as gardens, which supply food to the surrounding neighborhoods. This program has spawned continued positive growth, socially and economically, in communities where it works. Property values surrounding newly created open space have increased, which in turn increases city tax revenues. This program has also helped to lessen crime, create opportunities to reduce impervious surface, and enables a community food source.</p>
Alexandria Match:	Although this program is sponsored by a non-profit group, Alexandria could use this model to create a smaller-scale City-supported program. Alexandria’s existing Adopt-a-Garden and Adopt-a-Park programs could be enhanced through a program such as this. And the City could form a volunteer committee to begin

such a program. The volunteers could garner support from local businesses, community members, and civic organizations.

References: Lecture and Discussion with Blaine Bonham of the Pennsylvania Horticultural Society (April 21, 2007).

Pennsylvania Horticultural Society web site

<http://www.pennsylvaniahorticulturalsociety.org/phlgreen/index.html>

Philly Green web site

<http://www.greenplanphiladelphia.com/>

2. Seattle P-Patch

Location: Seattle, Washington

Department: Seattle Department of Neighborhoods

Start Date: 1995

Description: The Seattle P-Patch is an organic community garden space that promotes community, market, and youth gardening and food policy. “P-Patch” is named after the Picardo family who taught community residents to farm on their land.

Twelve gardens are located within the Seattle’s boundaries on more than 23 acres of land and are farmed primarily by immigrants. Started in 1995 under the Cultivating Communities Program, the P-Patch mission is to “establish safe, healthy communities and economic opportunity through development...in low income neighborhoods.” In 2004, the program supported 100 households in fresh fruits and vegetables for 22 weeks out of the year. Seattle residents may subscribe to the program for a set yearly (seasonal) fee. The increase in the market value of the land being gardened led the City Council to incorporate a goal of providing for more community gardens into Seattle’s Comprehensive Plan. Funding for new gardens is allocated through the neighborhood planning process as a provision under this Plan.

Budget and Staffing:

The budget for the program is \$550,000 and it has 5.5 FTE staff.

Alexandria Match:

Old Town Alexandria's Market Square, managed by the General Services Department, is thought to be one of the nation's oldest continually operating farmer's markets. There are also several community gardens and other farmer’s markets throughout the City, two of which – Chinquapin Park and Holmes Run – are run by the

City. A program such as Seattle's P-Patch could be a good addition to the Department of Recreation, Parks and Cultural Activities' already robust outreach and education program, and could help to develop a more comprehensive urban agriculture program.

Points of

Contact:

Michelle Jones
Seattle Market Gardens' Marketing Manager
(206) 723-0678

References:

Seattle Market Gardens web site:
<http://seattlemarketgardens.org/index.html>

CREATING AND ENHANCING PARKS AND TRAILS

1. Blueways Water Trail

Location:

Mathews County, Virginia

Department:

Mathews Blueways Committee

Date Started:

1998

Description:

Mathews County designated 5 water trails along its shore line. To facilitate the use of these trails the county makes waterproof trail guides available to boaters and they map the trails on the Blueways Water Trail web site. There are numerous boat launch sites, as well as camp grounds and shelters along the trail. Mathews County uses these water trails not only for recreation purposes, but also to showcase its historic and natural resources by providing narrative information in its trail guides.

Alexandria

Match:

Alexandria has a number of existing trail systems that cross through the City, including the Alexandria Heritage Trail, the Potomac Heritage Trail, and the Mount Vernon Trail. Many of these trails have interpretive signage that could be enhanced or improved. (Note that the City recently released a new bicycle and pedestrian trail map that also shows a number of these areas.) Alexandria could tie its water trail into the larger John Smith Chesapeake Historic Trail, which is the first water-based National Historic Trail in the country. Alexandria could further enhance its water trail by partnering with NOAA to install interpretive buoys to narrate the history associated with the water trail.

In addition, the City-owned marina on the Potomac River has overnight boat slips for pleasure boats and commercial vessels, plus additional short-term docking space on sea walls and adjacent areas.

Alexandria could further increase public access for rowers by building a public boathouse on the Potomac. In 2002, The National Park Service conducted a site assessment of Daingerfield Island as a potential site for such a boathouse and found that it would be reasonable to locate a boathouse there. The study also found that impacts to wildlife at this site would be minimal.⁷⁸ Furthermore, the City could expand the number and location of its public docks and create greater access for small boats such as kayaks.

A significant financial investment would be necessary if a public boathouse were to be built. However, the City may be able to reduce a portion of their investment by requiring that the operators of the proposed water taxi to National Harbor pay for some, or all, of this infrastructure as part of their operating agreement. Alexandria could receive further assistance by partnering with NOAA.

Implementing a waterway trail would help promote sustainable living because it will promote outdoor activities such as kayaking which are non-polluting. Such a program would also expose visitors to the ecology of the riverfront, which could, in turn, promote greater environmental stewardship.

References: Matthews County, Virginia Blueways Program web site
<http://www.blueways.org/>

Chesapeake Bay Interpretive Buoy System
<http://noaa.chesapeakebay.net/docs/JSWTCBIBSfactsheet307.pdf>

National Park Service, George Washington Memorial Parkway
http://www.nps.gov/archive/gwmp/boathouse/facility_study.htm

FUNDING OPEN SPACE

1. Installment Purchase

Location: Burlington County, New Jersey

Department: Burlington County

**Date
Started:** 2001

Budget and

⁷⁸ NPS Site Evaluations for a Rosslyn waterfront site <http://www.nps.gov/archive/gwmp/boathouse/j-Chapter3a-RosslynLower.pdf>

Staffing: Semi-annual interest only payments. Payment of principle at the end of agreement term.

Description: Installment purchasing allows a local government to purchase open space land or its development rights over a period of time rather than through a single up front payment.

Burlington County used this financing strategy to preserve farm property adjacent to the Rancocas Creek. The county reached an agreement with the property owner to purchase the land for \$5 million. At the end of five years the property owner would receive \$4 million. Prior to that, the county would make semi-annual interest only payments on the unpaid principle.

This strategy allowed the county to preserve valuable open space while deferring payment on the principle for five years. The property owner benefited in part through a structuring of the agreement that allowed him to avoid paying capital gains tax.

Similar strategies have also been used in Howard County, Maryland and Virginia Beach, Virginia.

Alexandria Match:

This type of financing structure may allow Alexandria to purchase and preserve more open space than it could through fee simple purchase alone. It may also increase the number of willing sellers by offering incentives such as the ability to avoid capital gains tax.

A number of cities and counties have used this strategy successfully purchase open space and there are financial firms that specialize in brokering these financial agreements. Virginia Beach has shown that this type of program can work in Virginia.

References: Association of New Jersey Environmental Commissions.
“A Handbook for Financing of Public Open Space in New Jersey.”
<http://www.anjec.org/pdfs/PublicFinancingOpenSpace.pdf>

Evergreen Capital Investors (Consultant)
Burlington County, New Jersey
Farmland and Open Space Preservation Program
http://www.evergreenca.com/farm_bc.html

2. Medical Mile Trail Sponsorship

Location: Little Rock, Arkansas

Department: Trail Coordinator for the City of Little Rock and The Heart Clinic of Arkansas

Date Started: 2003

Budget and Staffing:

24 cardiologists and 1 City Trail Coordinator. The original target was to raise \$350,000, though ultimately \$630,000 was raised.

Description:

Cardiologists from the Heart Clinic of Arkansas led an effort to sponsor 1 mile of the 24 mile Arkansas River Trail. The sponsored section of the trail is known as the Medical Mile and runs through downtown Little Rock, Arkansas.

Donations for the trail came from the medical community at large which included, among others, hospitals, doctors, and drug companies. According to Terry Austin, the Trails Coordinator, the fundraising was successful because it took advantage of the medical community's desire for community recognition. Austin points out that no one in the medical community wanted to be left out so it was relatively easy to convince them to donate money to get their names on bricks, benches, plaques, etc.

This section of trail was selected for sponsorship because of its prominent downtown location which garners maximum attention for its sponsors.

The Medical Mile is environmentally beneficial because it promotes non-polluting activities such as biking and walking.

This program was highly successful. It raised nearly twice the money as was expected and it was nominated for the US Dept. of Health and Human Services "Innovation in Prevention" Award. The State of Arkansas also contributed \$113,000 to the trail project with a grant that was funded by tobacco settlement money.

Alexandria Match:

This project is an example of a highly successful public/private partnership which benefits the environment and promotes active living. Alexandria could adopt a similar partnership with the Inova Health System, for example. Austin suggests that the speed and effectiveness of this partnership could be increased if a dedicated project coordinator was hired to organize, design and communicate with the city and with donors.

References:

American Trails Conference. Austin, Texas
<http://www.simcoecountytrails.net/images/2004%20American%20Trails%20Conference.pdf>

3. Subdivision Regulations ⁷⁹

- Location:** Virginia Beach, Virginia
- Department:** Virginia Beach Planning Department
- Date Started:** Subdivision ordinance originally adopted in 1970, with amendments
- Description:** This ordinance stipulates that a minimum percentage of open space for new development – ranging from 3% - 15% depending on lot size – be set aside for new subdivisions. Additionally, the ordinance states: “any reservation of land for public acquisition and use required under this provision shall be void if not exercised within five (5) years from the date of recordation of the subdivision agreement; provided, however, that the City Council may release such reserved land at an earlier date if it is found to be no longer necessary to the public purpose.” The compensation due the developer shall be an expressed element of the subdivision agreement.
- Alexandria Match:** The City of Alexandria already has a similar program, though under Virginia Beach’s program structure, even if the City were unable to acquire the open space at the time of development they would have a five-year window to negotiate with the property owner and come up with the funds needed.
- References:** Virginia Beach Subdivision Regulations
http://www.vbgov.com/file_source/dept/mcg/Web%20Page/Hot%20Topics/GreenRibbonCommittee/Documents/NaturalResourceManagementSubcommittee/appendix_b_subdivision_regulations.pdf

ENHANCING BIODIVERSITY AND ECOLOGICAL HEALTH

1. BioBlitz

- Location:** Great Falls, Virginia (Potomac River Gorge)
- Department:** The Nature Conservancy and the National Park Service
- Date Started:** 2006
- Budget and Staffing:** 135 scientists and volunteers

⁷⁹ City of Virginia Beach ordinance No.1106, 10-20-80 and No.1585, 2-10-86

Description: BioBlitz surveys have been conducted throughout the country since 1996 and began with the survey of Kenilworth Park in Washington, D.C. Potomac George’s BioBlitz is a 30-hour field survey of the biodiversity found on national parkland in the Potomac Gorge. The BioBlitz includes scientists and volunteers, divided into 18 field research teams. These teams identified and tallied species of plants and animals that were considered historically under-surveyed such as snails, spiders and fungi, as well as more commonly identified species such as butterflies and reptiles. Invasive species were also identified as part of the survey. The Bioblitz identified more than 1,000 different species.

The BioBlitz program works best when it is part of a larger biodiversity conservation strategy. This program benefits the environment by drawing attention to the richness of urban biodiversity and cataloging it. BioBlitz can also be used to determine the accuracy of a biodiversity plan. Pierce County, Washington used BioBlitz to assess the level of predicted species in a single biodiversity management area. Volunteer participation and city-generated publicity will raise public awareness and interest in supporting future conservation strategies.

Alexandria

Match: This program has a strong track record and has been implemented with success in numerous locations around the country. Increased knowledge of biodiversity in Alexandria will allow informed conservation strategies to be implemented and areas of particular sensitivity to be targeted or to answer specific biodiversity questions. Alexandria could utilize the BioBlitz model to assess single parks within the City or to use the program to make a citywide assessment. The organization of an event would be largely volunteer-based. The City could even draw volunteers from outside by making this program part of a larger event such as its Earth Day festival.

References: The Nature Conservancy, Maryland web site
<http://www.nature.org/wherework/northamerica/states/maryland/news/news2087.html>

2. Pesticide Free Parks

Location: Seattle, Washington

Department: Office of Sustainability and Environment, Seattle Parks and Recreation

Date Started: Seattle’s Pesticide Use Reduction Program began in 1999. The Pesticide Free Parks Program began in 2001. This program is part of

Seattle's city-wide Pesticide Use Reduction Program which began in 1999.

Budget and Staffing:

Staff numbers vary between park districts. There are one or two district gardeners per park district who help to select the parks that will participate in the program. District gardeners also oversee program management and application. \$75, 000 was budgeted to fund pilot program

Description:

There are 22 Pesticide Free Parks in the City of Seattle. This program is part of the Seattle's self-imposed mandate to reduce pesticide use city wide by 30%. Parks were selected according to criteria which included the potential for strong volunteer support, an area of less than ten acres, and public education opportunities. Of the fourteen original park sites chosen, six were designated as feature sites to raise public awareness of the program.

Public education is an important component of the Pesticide Free Parks Program. Demonstrations are held both to show citizens how the park itself is being managed in an environmentally sustainable way as well as how some of these techniques can be applied to private landscapes and lawns.

The Parks Department is continually testing new methods of pesticide free management in these selected parks. Some of these tests have included the use of hot water to control weeds, the use of beneficial insects to control pest insect species, and the use of compost tea to improve the health of plants and soils.

The Pesticide Free Parks Program is environmentally beneficial because it incorporates sustainable practices into park management by reducing the use of toxic chemicals and by piloting alternative management strategies. This program also educates private citizens and other City departments on sustainable landscape management practices.

This program has garnered a significant amount of public support which has been critical to its success. According to Barbara DeCaro of the Parks Department, the public would like all Seattle Parks to become pesticide free. Qualitative inspections of these parks have also shown that they are able to maintain the same high quality of landscape management as the other parks in the city that are not pesticide free.

Alexandria Match:

To adapt this program for use in Alexandria, the City would probably want to start small with a few demonstration parks to promote the program and garner public support. Additional staffing

will be required to implement and oversee program management. Finally, this program will need to be part of a larger initiative to promote the reduction of chemicals and pesticides throughout the City. This city-wide pesticide reduction initiative will need to be enforced through additional legislation that sets mandatory use restrictions and establishes long-term reduction timelines.

References: Seattle Pesticide Free Program web site
<http://www.seattle.gov/environment/pesticides.htm>

3. Weed Warriors

Location: Montgomery County, Maryland

Department: Maryland National Capital Park and Planning Commission

Date Started: 1999

Budget and Staffing: A city-employed Forest Ecologist trains volunteers. Half of a full-time position is dedicated to administering aspects of the program such as GIS and citizen feedback. A half-time staff position coordinates with volunteers. The staff member in this position has previous experience with invasive plant management. An additional half-time staff member was recently added to lead work days for students and community groups.

Description: The Weed Warriors program trains citizens to recognize and remove invasive plant species. Invasive plant species compete for resources with native plants and often edge these native plants out. The health of native plants can be improved when invasive species are removed. Through this program approximately 500 citizens have been certified since 1999. The program is run by Carole Bergmann, Montgomery County's Forest Ecologist.

Once trained, the weed warriors are free to operate according to their individual schedules or they can participate in special workdays which focus removal efforts on high priority parks. Montgomery County points out that participating in this program can be easily combined with daily activities that citizens already perform such as walking their dogs.

This program has trained over 500 volunteers, which shows that there is strong citizen support. Bergmann states that in a number of parks where this program is operating there is a noticeable reduction in the amount of invasive plants.

Alexandria

Match: The City of Alexandria currently works with citizens to undertake invasive species clean-ups in local natural areas and parks. The City also collaborates with Arlington County on a Master Gardeners program and the Northern Virginia Conservation Trust partners with the City to do invasive species clean-ups. In addition to what the City is already doing, Alexandria could carry out an invasive plant species assessment of its open space and parks to determine what invasive plants are present in the City and where priority removal areas would be. Alexandria may also want to consider holding trainings for invasive species identification

References: Weed Warriors Program web site
http://www.mc-mncppc.org/Environment/weed_warriors/intro.shtm

SUPPLEMENTAL OPEN SPACE PROGRAMS AND PRACTICES

1. Park Bonds

Introduction: Voting to pass bonds for the acquisition of parkland, trail improvements, and new recreational facilities is a popular option for open space preservation local jurisdictions. The following are just a couple of examples of jurisdictions that have elected to pursue bonds as a way to pay for parks and recreation initiatives.

Location: Fairfax County, Virginia

Description: On November 8, 2006, the voters of Fairfax County reaffirmed the importance of parks when they approved a \$25 million park bond referendum by 78%, the highest percentage in the history of Park Authority bond programs. Of this bond, \$10 million will be dedicated to open space acquisition and \$5 million will be used to improve the county trail system. Another park system bond measure will be voted on in 2008.

The Fairfax County Park Authority administers 23,774 acres of parkland, which represents 9.4% of the county's land. As a result of the passage of the 2006 bond referendum, the Park Authority will be able to increase its land acquisition program, convert at least one dozen existing grass fields to synthetic turf, and further develop its county-wide comprehensive trail network.

General obligation bonds are primarily used to renovate existing facilities. Updating aging structures presents a major challenge for the Park Authority. The utilization of general obligation bonds ensures that current users are not burdened with the full cost of improvements, but that these costs are spread over an extended

period of time. This assures that future generations of park users who enjoy the benefits of improved park facilities will contribute to their costs.

References: Fairfax County 2006 Park Bond Referendum
<http://www.fairfaxcounty.gov/parks/2006bond.htm>

Location: Raleigh, North Carolina

Description: On May 15, 2007, the Raleigh City Council voted unanimously to hold a referendum on a proposed \$88.6 million bond issue for parks and greenway improvements. Projects in the 2007 bond program focus on greenway development, park land acquisition, facility upgrades, expansion of existing facilities, new park development and redevelopment of older park facilities. Raleigh's citizens voted in favor of the Parks and Greenways Bond referendum, which gave the city the authority to borrow up to \$47.25 million for parks, greenway and recreation facilities.

References: City of Raleigh's website
www.raleighnc.gov/parkplan.

2. Restaurant and Meals Tax

Location: Virginia Beach, Virginia

Description: Virginia Beach, Virginia has dedicated a portion of the restaurant and meals tax to open space acquisition. Virginia Beach's Open Space Program was created by identifying and prioritizing potential open space sites throughout the City to serve future outdoor recreational public purposes: to preserve cultural and natural areas; to preserve and provide public access to greenways, beaches and scenic waterways; to provide land for future parks and athletic facilities; and to provide connectivity to community resources through trails.

In addition to use of restaurant and meals tax for open space acquisition, the Virginia Beach City Council appropriated more than \$50 million for open space acquisitions in 2001 and appointed the Open Space Subcommittee of the Parks and Recreation Commission to help prioritize open space acquisitions and oversee open space funding. As of July 11, 2006, 1,770 acres have been acquired on 17 sites through the City's Open Space Program.

In addition to Alexandria's existing percentage of real estate tax devoted to open space acquisition the City could utilize a portion of

other taxes for open space preservation – such as restaurant and meals tax, which are less reliant on a fluctuating real estate market.

References: Virginia Beach Open Space Acquisition Program Summary
<http://www.vbgov.com/vgn.aspx?vgnextoid=6f77964c2b04c010VgnVCM1000006310640aRCRD&vgnnextchannel=d9aac67a3e83b010VgnVCM100000870b640aRCRD&vgnnextparchannel=dfee54cf18ad9010VgnVCM100000870b640aRCRD>

3. Open Space Sales and Use Tax

Location: Boulder, Colorado

Description: Boulder County has created several sources of funding for open space acquisition. Until 1994, property tax funds provided approximately 90 percent of the total funds available for open space purchases. The open space acquisition budget from property tax revenue is roughly \$4 million.

Since 1994, the county has had an Open Space Sales and Use Tax of .45 percent. In 2000, voters approved an eight-year extension of a 0.10 percent recycling and composting tax to help fund open space purchases. In November 2004, voters approved a new open space sales tax of 0.10 percent through 2024; after 2024, half of this tax (0.05 percent) will remain in perpetuity to fund open space maintenance costs. Boulder County also requires the distribution of all net lottery proceeds from the state for parks, open space, and wildlife habitat purposes.

References: http://www.co.boulder.co.us/openspace/about_us/acquisitions.htm

4. New Construction and Property Conveyance Tax

Location: San Jose, California

Description: San Jose has a new construction tax of \$150 per single-family unit, \$82.50 per multi-family unit, and \$0.08 per square foot for commercial and/or industrial buildings to generate funds for acquisition and development of new neighborhood parks.

There is also a property conveyance tax with a rate is \$3.30 for each \$1,000 of property value sold. In addition, San Jose generates funds for acquisition and development of new neighborhood parks through the Parkland Dedication and Park Impact Ordinance, which assesses a fee that ranges between \$3,550 and \$9,400 per single-family unit, depending on the project's location.

References: San Francisco Community Power Newswire
<http://www.sfpower.org/newswire/landuse20.php>

5. Park Enhancement Grant (PEG)

Location: Arlington County, Virginia

Description: Arlington County Park and Recreation Commission's Park Enhancement Grant (PEG) Program is administered by the Arlington County Park and Recreation Commission. The Park and Recreation Commission is a volunteer citizen Commission, whose members have been appointed by the Arlington County Board. Since the program began in 1978, more than 220 projects have been funded at a maximum award of \$12,000 for an individual project. Civic and homeowner associations, community non-profits organizations, civic service clubs, school-related groups, and ad hoc neighborhood-based groups are eligible to apply for the program. Examples of improvements include sports or building amenities, drinking fountains, invasive removal, erosion control, public art, park furniture, new pathways, gardens or landscaping, pathways, fencing, public art, and signage. Projects must be on land owned or leased by the county or privately owned land with a general public use easement.

This program has increased citizen involvement and stewardship in the county's parks and open spaces. The idea behind it is that if a citizen is involved with open space they will be more likely to care for existing open space and demand more open space in the future. This program was created in 1978 and has continued to the present with over 220 funded projects and with an increased maximum award of \$12,000.

References: Arlington's Park Enhancement Grant Program web site
<http://www.arlingtonva.us/Departments/ParksRecreation/scripts/parks/ParksRecreationScriptsParksPEGProgram.aspx>

6. Car Free Parkways

Location: Various

Description: A number of cities close portions of their roadways to cars in order to allow walking and biking. New York City does this in Central Park and Washington D.C. does it in Rock Creek Park. Alexandria might institute a similar program and close portions of King Street in Old Town to make a walking business district on the weekends.

Alexandria could hold Ciclovía events during which a number of streets would be closed to cars to allow pedestrian and bicycle traffic exclusively. El Paso, Texas is one of first cities in the United States to hold its own Ciclovía festival during which they close designated streets to cars every Sunday in May. The City defines its Ciclovía as a “temporary urban space in which neighbors regularly interact with one and other through exercise.” Ciclovías are also popular in South American cities such as Bogota, Cali, and Medellin.

References: New York City Car Free Parkways
http://www.nycgovparks.org/sub_things_to_do/facilities/bicycling_greenways/html/af_bike_car_hours_new.html

El Paso Ciclovía: “Take the Parks to the Streets” web site
<http://www.elpasotexas.gov/ciclovía.asp>

7. Urban Agriculture

Location: Vancouver, British Columbia

Description: Green roofs can be utilized for agriculture. The Fairmont Waterfront Hotel in Vancouver, British Columbia grows all of its own spices to use in its kitchen. This saves the hotel \$20,000 to \$25,000 in food expenses each year.

Toronto and Vancouver also sponsor similar community garden programs.

References: Feeding the City from the Back 40: A Commercial Food Production Plan for the City of Toronto:
http://www.toronto.ca/health/tfpc_feeding.pdf

Vancouver's Community Gardens:
<http://city.vancouver.bc.ca/parks/info/policy/comgardn.htm>

8. Edible Schoolyard

Location: Berkley, California

Description: The Edible Schoolyard is a non-profit group which is located at the Martin Luther King Middle Jr. Middle School in Berkley, California. The school converted over an acre of parking lot into a school garden. This garden is used to teach the students about ecology, agriculture, and sustainable practices. The students manage the garden and all of the food they produce is used in the school’s cafeteria to produce healthy lunches for the students.

References: Edible Schoolyard organization web site
<http://www.edibleschoolyard.org/about.html>

9. School Park Program

Location: Houston, Texas

Description: Houston created the SPARK school park program in 1983. SPARK is a non-profit organization that develops schoolyards into public parks through partnerships with the Parks Board, the Department of Housing and Community Development, local school districts, private businesses, and community organizations. Individual schools must request to participate in the program and schools in areas which lack adequate park facilities are usually given priority. The SPARK program is designed to involve the entire community in order to make each park a reflection of that community. This program has won numerous awards and is also being implemented in Baton Rouge, Louisiana. There are currently 180 SPARK parks.

References: School Park Program web site: <http://www.sparkpark.org/>

10. Backyard Wildlife Sanctuary

Location: Washington State; Arlington, Virginia; Falls Church, Virginia

Description: The Washington State Department of Fish and Wildlife sponsors its Backyard Wildlife Sanctuary program to help homeowners manage wildlife in their backyards. The program intent is to mitigate habitat loss as development occurs. Homeowners receive an information packet about the program, which includes information on how to landscape for wildlife, which native plants are best to grow to attract different animals, and how to certify their backyard as an official backyard wildlife sanctuary.

Falls Church, Virginia and Arlington, Virginia both have active citizen-run Backyard Wildlife Sanctuary programs to promote the creation and maintenance of backyard habitats. Arlington is currently certified by the National Wildlife Federation as a Community Wildlife Habitat and Falls Church is working toward the same certification.

References: Washington Department of Fish and Wildlife Backyard Wildlife Sanctuary web site: <http://wdfw.wa.gov/wlm/backyard/>

Falls Church City Backyard Habitats web site:
<http://www.fallschurcheenvironment.org/fcbackyardhabitats.html>

11. Free the Trees

Location: Toronto, Ontario

Description: This program expands the sidewalk tree pits in which street trees grow, benefiting tree roots and helping to prevent the sidewalk from buckling. Larger tree pits also allow the tree to receive more nutrients from the soil as well as more water.

The need for the Free the Trees program was identified through the City's volunteer street survey program. The street survey program trains volunteers to inventory street characteristics such as the health of trees. This information is then be analyzed and programs are developed to address identified areas of need.

References: Sustainable Seattle web site, Free the Trees program
<http://www.sustainableseattle.org/Programs/SUNI/ActionandChange/freethetrees>

12. Sculpture Birdhouses

Location: Providence, Rhode Island

Description: Woonasquatucket River Watershed Council in Providence worked with a local artist to design sculpture birdhouses from trash that was cleaned up from the watershed. These birdhouses were created as a demonstration project at a local park. The dual purpose of this program is to create habitat for a number of bird species and to increase public awareness of the watershed's biodiversity.

References: "New Works Sculpture Project: Bird Nesting Houses on the Woonasquatucket"
found on: <http://www.woonasquatucket.org/newworks.htm>

13. Parks with Interpretive Boardwalks

Location: Various

Description: Localities with preserved natural areas, especially wetlands, may install a boardwalk to allow park visitors to get a closer look at habitats without significantly impacting them. These interpretive boardwalks also encourage more park visitors by easing access to the most interesting natural areas. Increased park usage with minimal environmental impact helps to foster an ethic of environmental protection among the general public and raise the park's public profile, which may help provide more general political constituency for public parks.

The Scuppernong River Interpretive Boardwalk, in Columbia, North Carolina, extends for 3/4 of a mile and offers visitors a closeup view of a rich Cypress swamp ecosystem as well as river views, within walking distance of downtown. Another boardwalk that links urban areas with natural areas is Ocean City, Maryland's Inlet Park. Still being extended, this boardwalk offers beach visitors and residents a stroll through bay-side wetlands. While a state, not local, park, North Landing in Virginia Beach shows the potential of a boardwalk to open the most interesting parts of a large natural preserve to the public. North Landing is the most-visited park in Virginia.

While boardwalks are most often built to access wetlands, they can be used in other settings as well. Greenbriar, West Virginia's Beartown State Park gives visitors easy access to a system of mountainside caves that legend says were once inhabited by a colony of bears. Calvert County, Maryland's Flag Ponds Nature Park offers visitors a walk through both wetlands and forest environments with rich populations of birds. Finally, Fairfax County's Huntley Meadows Park is a leading example of wetlands access with a 2/3-mile boardwalk covering several types of habitat, including forest edge and a bird blind.

References:

Beartown State Park, West Virginia
http://www.stateparks.com/beartown_greenbrier.html

Virginia Living Museum, Newport News Virginia
<http://www.thevlm.org/>

North Landing River Natural Area, Virginia Beach Virginia
<http://www.dcr.state.va.us/dnh/nlanding.htm>

Huntley Meadows Park, Fairfax County, Virginia
<http://www.fairfaxcounty.gov/parks/nature.htm>

Flag Ponds Nature Park, Calvert County, Maryland
<http://www.dnr.state.md.us/baylinks/14.html>

Inlet Park, Ocean City, Maryland
<http://www.ococean.com/parks.html>

Scuppernong River Interpretive Boardwalk, Columbia, North Carolina
<http://www.americantrails.org/nationalrecreationtrails/trailNRT/scuppernong-NC.html>

14. Neighborhood Development

Location: Charlottesville, Virginia

Description: In 1999, the City of Charlottesville consolidated several departments to form the Neighborhood Development Services Department in an effort to be more responsive to neighborhood concerns. The mission of this department is: "To safeguard the interests and wellbeing of Charlottesville's neighborhoods through world-class customer services that provide community-oriented engineering, proactive code enforcement, and collaborative neighborhood planning." Accordingly, this department helps coordinate neighborhood plans, oversees neighborhood projects – such as new parks, and acts as the point of contact for neighborhood groups. Through this department, citizens can request areas be preserved as open space or can request park maintenance.

References: Charlottesville's Neighborhood Development Services Department web site: <http://www.charlottesville.org/Index.aspx?page=31>

Arlington, Virginia has a similar program:

<http://www.arlingtonva.us/DEPARTMENTS/CPHD/ons/CPHDOnsConservation.aspx>

USEFUL LINKS

- American Greenways Program
www.conservationfund.org
- Community Gardens
www.fhwa.dot.gov/environment/te/index.htm
- Community Greens web site
<http://www.communitygreens.org/>
- Congress for a New Urbanism
<http://www.cnu.org/>
- Conservation Fund
<http://www.conservationfund.org/>
- Greening Charles Village: A Step-by-Step Proposal on How to Retrofit a Community Green into an Established Baltimore City Neighborhood
<http://www.communitygreens.org/Resources/Kristinspaper.doc>

- Land and Water Conservation Fund
<http://www.nps.gov/ncrc/programs/lwcf/>
- New Governor's Institute to Support Leadership in Good Community Design and Sound Planning
<http://www.govinstitute.org/>
- Scenic America
<http://www.scenic.org/>
- The Nature Conservancy
<http://www.nature.org>
- The U.S. EPA Development, Community and Environment Division
<http://www.epa.gov/smartgrowth/>
- The Urban Land Institute
<http://www.uli.org//AM/Template.cfm?Section=Home>
- Transportation Enhancements
<http://www.fhwa.dot.gov/environment/te/index.htm>
- Trust for Public Land
<http://www.tpl.org/>
- Virginia Outdoors Foundation
www.virginiaoutdoorsfoundation.org